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ABSTRACT

The National Education Longitudinal Study of 1988 (NELS:88), a longitudinal study sponsored by the National Center for Education Statistics, provides trend data about transitions experienced as young people develop, attend school, and embark on careers. The study began with a national sample of about 26,000 eighth graders in 1988 and follows these students at 2-year intervals through high school and further. Findings of the base year are summarized, drawn from the descriptive summary "A Profile of the American Eighth Grader" by A. Hafner and others (1990). Characteristics of sample members, in-school and out-of-school experiences, and aspirations and choice behaviors are described. The paper is divided into three sections: (1) background on the study; (2) cross-sectional findings from the NELS:88 base year, with 24 tables and 16 graphs; and (3) issues for the next wave of data. Appendix 1 describes generating the sample; Appendix 2 gives a chart of key questionnaire items. (SLD)

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FINDINGS FROM THE NELS:88 BASE YEAR STUDENT SURVEY

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THE NATIONAL EDUCATION LONGITUDINAL STUDY OF 1988 (NELS:88): FINDINGS FROM THE BASE YEAR STUDENT SURVEY.

Abstract. NELS:88, a major longitudinal study sponsored by the National Center for Education Statistics, is designed to provide trend data about critical transitions experienced by young people as they develop, attend school, and embark on careers. The study began with a nationally representative sample of eighth graders (and of eighth grade schools) in the spring of 1988, which collected contextual data from their teachers, parents, and school principals as well as cognitive test and questionnaire data from the students themselves. The study will follow sample members at two year intervals through completion of high school and for some years thereafter. This paper presents findings of the base year study, and draws primarily on the NELS:88 Student Survey Descriptive Summary (A Profile of the American Eighth Grader, Hafner, Ingels, Schneider and Stevenson, 1990), an NCES survey report that summarizes the characteristics of the sample members, describes their school and out-of-school experiences, and reports on their aspirations and choice behaviors at the point of the critical transition to secondary school. Analysis in the descriptive summary is confined to simple crosstabulations that will, it is hoped, give researchers and policy analysts some feel for the analytic potential of the NELS:88 data, and will provide the wider community of educators and interested citizenry with something of the flavor of this important dataset. The baseline data will have longitudinal import starting with release of the first follow-up data. Although the major research issues addressed by NELS:88 are longitudinal in nature (such as students' academic growth over time and the family, community, school and classroom factors that promote or inhibit such growth; the transition from elementary to secondary school; the process of dropping out of school, as it occurs from eighth grade on, and of re-engagement with schooling at a later date), there is nevertheless much of cross-sectional interest in the base year data. The purpose of this paper is to point to some of the main issues of interest that are identified in the NELS:88 base year descriptive summary.

The paper is divided into the following sections:

I. Background on NELS:88
   - A. Study goals and overall design
   - B. Components: surveys of students, teachers, parents, principals; language minority (Hispanic, Asian Pacific) supplements
   - C. Sample Design

II. Cross-sectional findings from the NELS:88 base year
   - A. Highlights
   - B. Selected tables and figures

III. Longitudinal Postscript: issues for the next wave

I. NELS:88: Background

I. A. Overview: the study design.

This longitudinal study, by beginning with a cross-section of approximately 26,000 1988 eighth graders, following a substantial subsample of these students in 1990 and thereafter, and by freshening* the sample to ensure tenth and twelfth grade nationally representative student samples in 1990 and 1992, will provide a point of comparison with the high school classes of 1980 and 1982, studied by High School and Beyond (HS&B), and the high school class of 1972, studied by the National Longitudinal Study of the Class of 1972 (NLS-72).

The overall scope and longitudinal design of the study offer at least five major benefits:

(1) Longitudinal focus. First, the study provides the basis for within-cohort comparison by following the same individuals over time. NELS:88 will thus provide measures not only of educational attainment but also explanations of the reasons for and consequences of academic success and failure. (Coincidentally, NELS:88 data will permit the most comprehensive and sophisticated assessment to date of the cumulative impact of the recent school reform movement.) Individual and group level change is captured by NELS:88 in particular by its emphasis on the measurement of cognitive growth and the recording of key transitions.

Many if not most of the questions policy makers seek to answer involve some notion of change over time. Although cross-sectional analysis may approximate the study of the process of change by using a number of devices, the risk involved is substantial and the possibility of examining causal relationships is nil. For example, a study may ask respondents who have failed to complete their elementary education when they started to think about or plan on dropping out, but the danger here is that the farther back they are forced to reach into their memories, the less accurate they are likely to be. (For a summary of recent literature on the unreliability and biases of retrospective survey responses, see Pearson, 1989). Even apart from the limitations and distortions of retrospective accounts, however, cross-sectional approaches are not suitable vehicles for measuring individual change nor do they provide a viable basis for causal inference. (While longitudinal studies offer a superior vantage point for addressing questions of why certain phenomena obtain, again see Pearson 1989 for some qualifications of this claim).

(2) Representative national cross-section. The second benefit of the NELS:88 design is that it provides a representative cross-section of eighth graders in the United States, thereby shedding light on the factors at the demographic and environmental levels that affect educational outcomes such as school performance and individual aspirations. Thus--and unlike its predecessor national longitudinal studies, NLS-72 and HS&B, NELS:88 establishes a baseline for measuring the impact of secondary schooling at a point just prior to entry into high school.

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*See Appendix 1 for an explanation of sample freshening in NELS:88.

(3) Transitions of early adolescence. The third advantage of the NELS:88 design is that it begins with early adolescence, a developmental transition period in which major changes in individual attitudes and behaviors take place, and a time point that also marks the transition to secondary schooling. Thus it provides a basis for understanding such areas of concern as the impact of tracking and school and program choice in the middle years on subsequent educational and occupational outcomes, and the interaction between schooling and the crystallization of key attitudes, values and aspirations. While earlier studies such as NLS-72 and HS&B monitored the critical transition from high school completion to the labor force, postsecondary education, and family formation, the singular strength of the NELS:88 design is that it also encompasses the key school transition from eighth grade to high school and associated developmental transitions of early adolescence.

(4) Trend analyses. The fourth design benefit is that NELS:88 offers the opportunity for the analysis of trends in areas such as academic performance. Cross-cohort comparisons with earlier NCES longitudinal studies will be possible as early as the 1990 wave of data collection.

(5) Holistic perspective. NELS:88 takes the student as the fundamental unit of analysis, further illuminating the student data by tapping the rich contextual information available from other respondent populations and records sources. NELS:88's major features--the planned integration of school administrator and records, student, parent and teacher studies and the inclusion of supplementary components to support analyses of demographically distinct subgroups such as Hispanics and Asians, stamp the study with an exceptionally comprehensive research design.

The data produced through this design can facilitate the development and evaluation of educational policy at all governmental levels. The NELS:88 data can also inform decision-makers, educational practitioners, and parents about the changes in the operation of the educational system across time, and the effects of various elements of the system on the lives of the individuals who pass through it. Thus the base year and follow-up studies explore a number of areas that define the basic outcome variables of NELS:88--those related to cognitive growth, occupational expectations and achievement, and personal and social development. Information has been gathered as well on numerous independent variables, such as standard demographics, and variables measuring educational support, parent's socioeconomic status, family composition, language use, and home environment. The core of intervening variables encompasses school experiences such as exposure to given curriculum content and structure, assessment and evaluation systems, social relations, school behavior, and participation in extracurricular activities.

I. B. Study Components.

The Student Survey

Students were surveyed in schools in the spring of 1988, completing a questionnaire that inquired into personal and family background, languages spoken and language use patterns in the home, opinions about self (self-esteem and locus of control), aspirations and plans for the future, jobs and chores, perceptions of school climate, schoolwork (including track, course enrollment, grades, time spent in doing homework, decision-making processes undergirding curricular choices), and extracurricular and outside-school activities.

In addition to the student questionnaire, NELS:88 eighth graders completed a series of four tests (in reading, mathematics, social studies [=history/citizenship] and science), that are designed to measure cognitive growth over time. Test items drew on an extensive item pool, that included questions common to earlier longitudinal studies test forms (NLS-72, HS&B) as well as the National Assessment of Education Progress (NAEP), and items constructed specifically for NELS:88. For both mathematics and reading, proficiency levels were defined and were utilized in tabulations that were drawn on both for the Descriptive Summary and this paper. (For an account of the development of the NELS:88 cognitive test battery, see Rock and Pollack, in Ingels et al., 1987; for an account of the psychometric properties of the base year tests, see Rock and Pollack, 1990).

The Parent Survey

One parent of each child was included in the study. Parent data should be used primarily in the analysis of student behaviors and outcomes, and only secondarily as a dataset by itself. Parents completed a self-administered questionnaire that sought information on home background and education support system and the family's interactions with the school.

Teacher and Administrator Surveys

All full- and part-time instructors who were teaching classes in mathematics, science, English/language arts, and social studies to eighth graders in the spring of 1988 were included in the NELS:88 universe of eighth grade teachers. The actual sample was restricted to teachers who provided instruction in the listed subjects to the selected sample of eighth grade students within the sampled schools. Two teachers were sampled for each selected student. The administrative head of each school was also included in the sample. Again, since the student is the unit of analysis, the NELS:88 sample is not a national probability sample of eighth grade teachers, but of selected teachers of a nationally representative sample of eighth graders. The teacher questionnaire gathered contextual data on individual students, classes, and the teacher and school. The school administrator questionnaire provided additional school context data.

Appendix 2 displays key questionnaire items for the student, parent, teacher and school administrator surveys, in relation to selected themes in contemporary educational policy research.

The Asian and Hispanic Supplement

The NELS:88 design consists of a core sample, plus a supplementary sample of students (and parents and teachers) sponsored by the Office of Bilingual Education and Minority Language Affairs (OBEMLA). The OBEMLA supplement includes additional students of Hispanic and Asian descent beyond the numbers selected for the core study. This oversample of Hispanic and Asian students supplied analytically sufficient numbers of these groups and their principal subgroups (for example, Hispanic Americans of Mexican, Puerto Rican, Cuban, and other Hispanic descent; Asian students of Chinese, Japanese, Filipino, Korean or Southeast Asian descent) and statuses (for example, recent immigrants, versus Asians and Hispanics long established in the United States; bilingual "language minority" students, and students with moderately limited English proficiency, as well as Asian and Hispanic English monolinguals). Since the NELS:88 cognitive tests and questionnaires were available only in English, students with no or with severely limited English proficiency were therefore excluded from the sample. This exclusion qualifies the representativeness of the NELS:88 Hispanic and Asian student samples which offers coverage only of those eighth grade Asian and Hispanic Americans who are proficient in English. However, in the NELS:88 first follow-up two measures will be instituted that will take into account these special populations. A Spanish language version of the student questionnaire will be prepared, and students entering the sample through the freshening process, when proficient in Spanish but not in English, will be included in the sample and given the Spanish-language version of the questionnaire. In addition, a special follow-back study of the base year excluded students (including all students ineligible for reasons of a language barrier to participation) will investigate the status (whether in-school or out-of-school) of all base year excluded students two years later, and draw in students whose ineligibility status has changed (for example, those who in the intervening period have gained sufficient proficiency in English to complete at least the NELS:88 first follow-up questionnaire, or who can complete the instrument in its Spanish translation).

1. C. Sample Design*

Selection of Schools and Students

The NELS:88 Base Year sample is representative of eligible eighth grade schools and students in the fifty states and the District of Columbia. NELS:88 students were sampled through a two-stage process, modelled after that used for the two prior NCES longitudinal surveys, NLS-72 and HS&B.

The first stage involved stratified sampling of over 1,000 public and private schools from a universe of approximately 40,000 schools containing eighth grade students. Stratification is by administrative control, with an oversample of Catholic and other private schools; and by geography, permitting comparisons among the nine Census divisions (or, on the public use tape, four Census regions only). The sample was drawn with probabilities proportionate to a school's eighth grade enrollment.

The second stage included random selection of approximately 26 (24 core, and, on average, 2.2 oversampled Hispanic and Asian supplemental) students per

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*A more detailed account of the NELS:88 sample design can be found in the forthcoming NCES publication, NELS:88 Base Year Sample Design Report (Spencer et al., 1990), while a description of the NELS:88 data files is to be found in the four NELS:88 Base Year User's Manuals (Ingels et al., 1990)

school. However, owing to the presence of a number of schools with small eighth grades, the average sample size is approximately 25 students. Also, sample size per school is somewhat more variable than in the NELS:88 base year than in the 1980 round of High School and Beyond, owing to the uneven impact of the Hispanic and Asian oversampling. (For example, schools with few or no Hispanics may have had zero supplemental students thus a sample size of 24, while large schools with extremely high proportions of Asians or Hispanics or both may have had ten or more Asian and Hispanic students added to the base of 24. In contrast, the HS&B design assumed that Mexican-Americans and Puerto Rican Hispanics would enter the sample at a rate sufficient for analysis purposes through normal means, and supplemented their numbers with schools in which such less common Hispanic subgroups as Cubans were highly clustered.) Results of the HS&B and NELS:88 oversampling of Hispanic are compared below, as well as proportions of various Asian subgroups (Asians were not oversampled in HS&B).

NELS:88 Base Year vs. High School & Beyond Base Year (So.Cohort)
Unweighted Hispanic Subgroups as Proportions of the Total Sample

NELS:88 (1988)		HS&B (1980)	
Mexican origin:	7.9%	Mexican origin:	7.2%
Puerto Rican:	1.5	Puerto Rican:	1.4
Other:	2.8	Other:	2.5
Cuban:	.6	Cuban:	1.1
Total Hispanic	12.8		12.2

NELS:88 Base Year vs. High School & Beyond Base Year (So.Cohort)
Unweighted Asian Subgroups as Proportions of the Total Sample

	HS&B So:80		NELS:88	
Chinese	.4%	(106)	1.3%	(313)
Filipino	.4	(103)	1.2	(290)
Indian, Pakistani/ Other S.Asian	.6	(151)	.5	(127)
Japanese	.3	(86)	.4	(95)
Korean	.2	(45)	.8	(191)
Vietnamese/SE Asian	.1	(24)	1.0	(242)
Pacific Islander	.0	(12)	.4	(101)
Middle Eastern and West Asian	--		.3	(80)
Other Asian	.1	(18)	.4	(92)
Total %	2.1		6.1	
(Total Asian N)		(545)		(1531)
Total N, Pacific Basin Asians	376		1,232	
Total Sample Size	27,118		24,599	

Once students were selected, the NELS:88 sample design called for one parent to be surveyed for each selected student (including the oversampled

Asians and Hispanics), and two teachers in designated subject areas. Follow-up surveys are planned for 1990 and 1992, when most of the initial cohort will be in the tenth (1990) and twelfth (1992) grades, 1994, and for some period thereafter. Students who drop out of school will also be surveyed.

If one important respect in which the NELS:88 sample offers an opportunity that HS&B did not is the more ample representation of Asian subgroups, another respect in which the NELS:88 sample improves on that of HS&B is in the better representation accorded students in non-Catholic private schools. The NELS:88 and HS&B 1980 school samples are compared below.

The NELS:88 and HS&B School Samples

	HS&B	NELS:88
PUBLIC	893	815
CATHOLIC	84	104
PRIVATE, NON-CATHOLIC	38	133
TOTAL	1,015	1,052

II. Cross-sectional findings: a descriptive summary.

The findings reported below draw selectively on Hafner et al., 1990, which reports Standard Errors and sample sizes for all tables, and includes complete methodological and technical notes. All tables were based on weighted data. Summary highlights are reported in II-A under five rubrics:

1. **NELS:88 Eighth Graders: Their Statistical Profile**
2. **Their Mathematics and Reading Performance**
3. **At-Risk and Disadvantaged Issues**
4. **Their Perceptions of School/School Climate**
5. **Transition to High School: their aspirations and choices**

Graphs and tables are featured in II-B.

II-A. Highlights.

1. Statistical profile: characteristics of sample members (in weighted percentages)

* **71 percent are white**
  13 percent are black
  10 percent are Hispanic
  4 percent are Asian/Pacific Islander
  1 percent are American Indian/Alaskan Native

(Note: Hispanics and Asians were oversampled by design. The unweighted proportion of Hispanics in the base year sample was nearly 13 percent, with 6.2 percent Asian. Only non-Hispanic blacks are reported under "black"; Hispanic blacks are reported under "Hispanic". The NELS:88 datafiles also classify students by Asian and Hispanic subgroup--for example, Chinese, Korean, Filipino, Japanese etc.; Mexican-American, Cuban, Puerto Rican, etc.)

* **Some 2.3 percent of the students are considered to be limited-English-proficient**

(Note: non-proficient [NEP] and severely limited English proficient [LEP] students were excluded from the sample owing to inability to complete the survey forms in English; students less severely limited in their English language proficiency [though LEP] were included. Just over half of the NEP/LEP population in the sampled schools was included and just under half excluded from the base year sample.

* **The modal age was fourteen years; however, about a third became 15 years old or older in 1988**

* Approximately 88 percent of students are enrolled in public schools;
  8 percent are enrolled in Catholic schools;
  and
  5 percent in non-Catholic private schools.

(Note: private schools were oversampled in the NELS:88 Base Year. The unweighted percentage of public school attendees in NELS:88 was 79 percent; Catholic, 10.6 percent; and non-Catholic private, 10.5 percent).

* Three quarters of the eighth graders are enrolled in middle schools or junior high schools

* Overall, 18 percent reported that they had repeated at least one grade

* NELS:88 eighth graders spent four times as many hours watching television as doing homework (21.2 hours per week in TV watching, 5.5 hours doing homework)

* NELS:88 eighth graders typically spend only two hours per week on reading outside of school

2. Mathematics and Reading Performance

Mathematics. Some four fifths of sample members had reached at least the "basic" level in mathematics (addition, subtraction, multiplication, and division); the remaining fifth are unable to perform such everyday arithmetical tasks. Approximately 40 percent of students demonstrated proficiency at the intermediate mathematics level or above. (The intermediate level is associated with knowledge of decimals, fractions and percents--major topics in the middle school/junior high school mathematics curriculum.)

Some notable race/ethnicity differences in mathematics proficiency (not controlled for differences in socioeconomic status) include the following:

* About 30 percent of Hispanics, blacks, and American Indians are not proficient at the basic level;

* Only about a quarter of Hispanics and blacks demonstrate proficiency at the intermediate level or above (knowledge of decimals, fractions, and percents);

* Compared with a norm of 19 percent overall, approximately one third of Asian students demonstrated proficiency at the advanced level (= ability to perform simple problem-solving or to evidence conceptual understanding).

Reading. About 86 percent of NELS:88 eighth graders show basic reading proficiency (ability to reproduce detail or recapitulate the author's main thought). Fourteen percent of students overall are unable to perform such basic reading comprehension tasks.

3. At-Risk and Disadvantaged Issues.

While some students who are "at risk" succeed and some students who are "not at risk" fail, a number of factors have been identified with the prospect of lowered probabilities of educational success. Although there are many candidates for "at risk" status and many of these factors may be empirically highly correlated or conceptually interrelated, six factors that may be extracted from the base year dataset seem particularly good candidates for providing "at risk" indicators. The predictive utility of each of these factors, and of their impact in combination, may of course be assessed in future rounds as longitudinal outcome data becomes available. Also in future rounds, the relationship between "indicators" and causative factors may more be more fully explored. Those factors--and the weighted percentage of NELS:88 sample members who fall under each--appear below:

* a. **Single parent family:** 22 percent

  b. **Annual income less than $15,000:** 21 percent

  c. **Home alone > 3 hours per day:** 14 percent

  d. **Both parents lack a high school diploma:** 11 percent

  e. **Has a sibling who dropped out:** 10 percent

  f. **LEP status:** 2 percent

* **Overall, a little over half the students have no risk factors, a quarter have one risk factor, and a fifth have two or more risk factors**

* **About one quarter of eighth graders report being home alone on school days, for two or more hours, without an adult present:**

  13 percent report they are never home alone;

  32 percent report they are home alone less than one hour/day

  28 percent report one to two hours home alone

  13 percent report two to three hours alone

  14 percent report three hours or more home alone; racial/ethnic breakdowns for the three or more hours home alone category show that blacks (20%) and American Indians (19%) are more likely than whites (12%) to report being home without an adult for more than three hours a day; Asians and Hispanics fall between the extremes (16%).

* **Students with two or more risk factors are twice as likely as those with no risk factors to be in the lowest grades quartile (38% vs. 18%) and lowest test quartile (44% vs. 16%)**

* Students with two or more risk factors are six times as likely as those with no risk factors to expect not to graduate from high school (4% vs. 0.6%).

If, unsurprisingly, the NELS:88 data show strong associations between multiple risk factors and low performance on outcome measures, as well as lowered expectations for those at risk, it should also be noted that substantial numbers of students with no risk factors fall in the lowest grade and test quartiles, and that the proportion of those with two or more risk factors who do not expect to graduate from high school is, at four percent, quite strikingly (and probably unrealistically) low.

4. Perceptions of school and school climate

Over two thirds of the NELS:88 eighth graders report a positive school experience. They report feeling safe, and feel that the teaching in their schools is good.

* 88 percent report that they feel safe at school
* 80 percent report that the teaching is good
* 75 percent report that teachers are interested in students
* 69 percent report that discipline is fair
* 69 percent report that there is genuine school spirit
* 68 percent report that teachers listen to them
* 67 percent report that students and teachers get along
* 63 percent report that teachers praise their efforts

Nevertheless,

* Overall, 10 percent report that someone has offered to sell them drugs at school
* Hispanics and American Indians are more likely than others to report someone offered to sell them drugs at school (American Indians: 16%; Hispanics: 14%; vs. whites: 10%, blacks: 8%, and Asians: 5%.)
* Blacks, and American Indians, are twice as likely as whites (18% vs. 9.9%) to report that they don't feel safe at school.

5. The future: the transition to high school--aspirations and choices.

Although a majority of the NELS:88 eighth graders have high educational and occupational aspirations, many students are not planning to enter secondary school programs that will maximize their likelihood of achieving their high goals. In addition, while eighth grade represents a significant transition point at which students and their families must make a number of critical educational decisions, many NELS:88 sample members report little discussion

with parents, teachers, guidance personnel or others, of the critical choices that face them.

* Although two thirds of the students plan to complete college or obtain postgraduate credentials, only one third plan to enroll in a college preparatory program in high school

* Of students specifically planning to take a college preparatory program, only 47 percent are enrolled in algebra or honors mathematics

* A quarter of the sample members do not know which high school program they will enter

* When asked with whom they have discussed their prospective high school program,

  26 percent have never discussed program choices with their fathers

  54 percent have never discussed program choices with their teachers

  64 percent have never discussed program choices with guidance counselors

II-B. Figures and Tables.

Findings are reported under four main headings: (1) the characteristics of the individual sample members, (2) their school experiences, (3) their out-of-school activities, and (4) their aspirations and expectations for the future. Figures and tables are drawn from Hafner et al., 1990, and follow the numbering employed in the base year descriptive summary. (Gaps in the numbering scheme reflect the fact that not all tables in the base year descriptive summary have been reproduced in this paper.)

1. **Profile of eighth graders: characteristics of the NELS:88 sample members.**

Table 1.1: Percentage of eighth graders from families with different levels of education and affluence, by selected background characteristics

Table 1.2: Percentage of eighth graders from different types of household...

Figure 1.1: Percentage of eighth graders with low family income by family type

Table 1.3: Percentage of eighth graders repeating one or more grades in school (by age and characteristics)

Figure 1.2: Percentage of eighth graders who repeated at least one grade, by year of birth

Table 1.4: Percentage of eighth graders with one or more risk factors

Table 1.5: Percentage of eighth graders with various risk factors

Figure 1.3: Percentage of eighth graders enrolled in public and private schools

Figure 1.4: Percentage of eighth graders in schools with various grade spans

Figure 1.5: Percentage of NELS:88 eighth graders with various risk factors

Table 1.1.--Percentage of 8th graders from families with different levels of education and affluence, by selected background characteristics

Background Characteristics	PARENT EDUCATION					FAMILY INCOME		
	LESS THAN HIGH SCHOOL	HIGH SCHOOL GRADUATE	SOME COLLEGE	COLLEGE GRADUATE	GRADUATE DEGREE	LESS THAN $15,000	$15,000-50,000	GREATER THAN $50,000
TOTAL	10.5	20.9	42.1	14.2	12.3	21.1	57.5	21.4
SEX								
Male	10.1	21.2	41.5	14.6	12.6	20.0	58.1	21.9
Female	11.0	20.6	42.6	13.9	11.9	22.2	56.9	20.9
RACE/ETHNICITY								
Asian/Pacific Islander	9.1	12.8	33.0	23.3	21.7	18.3	51.1	30.6
Hispanic	33.3	18.0	36.2	6.5	5.9	37.5	53.0	9.5
Black	15.8	23.8	46.8	7.5	6.2	47.0	43.9	9.1
White	6.2	21.2	42.3	16.3	14.0	14.1	60.9	25.1
American Indian/ Alaskan Native	14.7	23.7	45.2	10.6	5.8	41.8	49.2	9.0
TEST QUARTILE								
Lowest quartile	21.4	27.3	40.7	7.0	3.6	37.3	53.0	9.8
25-49%	11.7	24.2	46.5	11.1	6.5	25.3	59.0	15.8
50-75%	6.5	20.7	45.8	15.6	11.5	15.0	62.3	22.7
Highest quartile	2.1	11.1	36.0	23.1	27.7	7.5	55.4	37.1
LANGUAGE PROFICIENCY								
Limited English	38.9	21.1	28.5	6.4	5.1	49.3	44.2	6.5
Non-Limited English	9.9	20.9	42.4	14.4	12.4	20.5	57.8	21.7
FAMILY COMPOSITION								
Mother & father	8.7	19.4	40.1	16.5	15.4	11.8	60.8	27.4
Mother & male guardian	9.5	22.5	49.6	10.9	7.5	23.5	59.2	17.4
Father & female guardian	8.2	21.0	47.6	14.0	9.1	13.5	62.3	24.2
Mother only	15.3	25.7	44.6	9.2	5.3	53.4	42.8	3.8
Father only	11.5	21.4	43.4	12.6	11.2	20.7	64.8	14.5
Other relative or nonrelative	24.7	20.3	38.8	9.6	6.5	43.0	47.3	9.7
URBANICITY								
Urban	12.5	19.0	41.7	15.0	11.9	26.9	54.1	19.1
Suburban	8.4	18.8	41.4	16.0	15.4	14.5	56.9	28.7
Rural	11.9	25.4	43.3	11.4	8.3	25.8	60.8	13.4

SOURCE: U.S. Department of Education, National Center for Education Statistics, "National Education Longitudinal Study of 1988: Base Year Student Survey".

Table 1.2.--Percentage of 8th graders from different types of households, by selected background characteristics

Student Characteristics	SINGLE PARENT HOUSEHOLD[1]	TWO PARENT			SINGLE PARENT		
		MOTHER & FATHER IN HOUSEHOLD	MOTHER & GUARDIAN HOUSEHOLD	FATHER & GUARDIAN HOUSEHOLD	MOTHER/FEMALE GUARDIAN ONLY IN HOUSEHOLD	FATHER/MALE GUARDIAN ONLY IN HOUSEHOLD	OTHER RELATIVE OR NON-RELATIVE ONLY IN HOUSEHOLD
TOTAL	22.3	63.6	11.5	2.6	16.5	2.6	3.2
SEX							
Male	22.0	64.5	10.6	2.9	15.7	3.0	3.3
Female	22.5	62.8	12.5	2.2	17.2	2.2	3.1
RACE/ETHNICITY							
Asian and Pacific Islander	14.3	78.4	5.4	1.9	8.3	2.4	3.6
Hispanic	23.4	63.5	11.2	1.9	17.7	2.2	3.5
Black	46.5	38.4	13.3	1.9	36.1	2.1	8.3
White	17.7	67.9	11.6	2.9	12.9	2.7	2.1
American Indian and Native Alaskan	31.1	55.6	11.8	1.5	21.1	3.6	6.4
SES QUARTILE							
Lowest Quartile	34.5	50.3	12.9	2.3	26.0	2.8	5.9
25-49%	22.6	61.3	13.0	3.0	16.9	2.7	2.9
50-75%	19.4	65.2	12.5	2.3	14.5	2.5	2.4
Highest Quartile	12.6	77.6	7.7	2.2	8.5	2.3	1.7
PARENT EDUCATION							
Less Than high school	34.0	53.3	10.7	2.1	23.7	2.8	7.5
High School Graduate	25.6	59.3	12.5	2.6	20.0	2.6	3.1
Some college	22.6	60.8	13.5	3.0	17.2	2.6	2.9
College graduate	14.8	73.9	8.8	2.5	10.4	2.3	2.1
MA degree/equivalent	11.8	80.4	6.2	1.6	7.6	2.2	1.9
PhD Degree/equivalent	9.4	79.4	8.7	2.6	5.5	2.5	1.4

SOURCE: U.S. Department of Education, National Center for Education Statistics, "National Education Longitudinal Study of 1988: Base Year Student Survey".

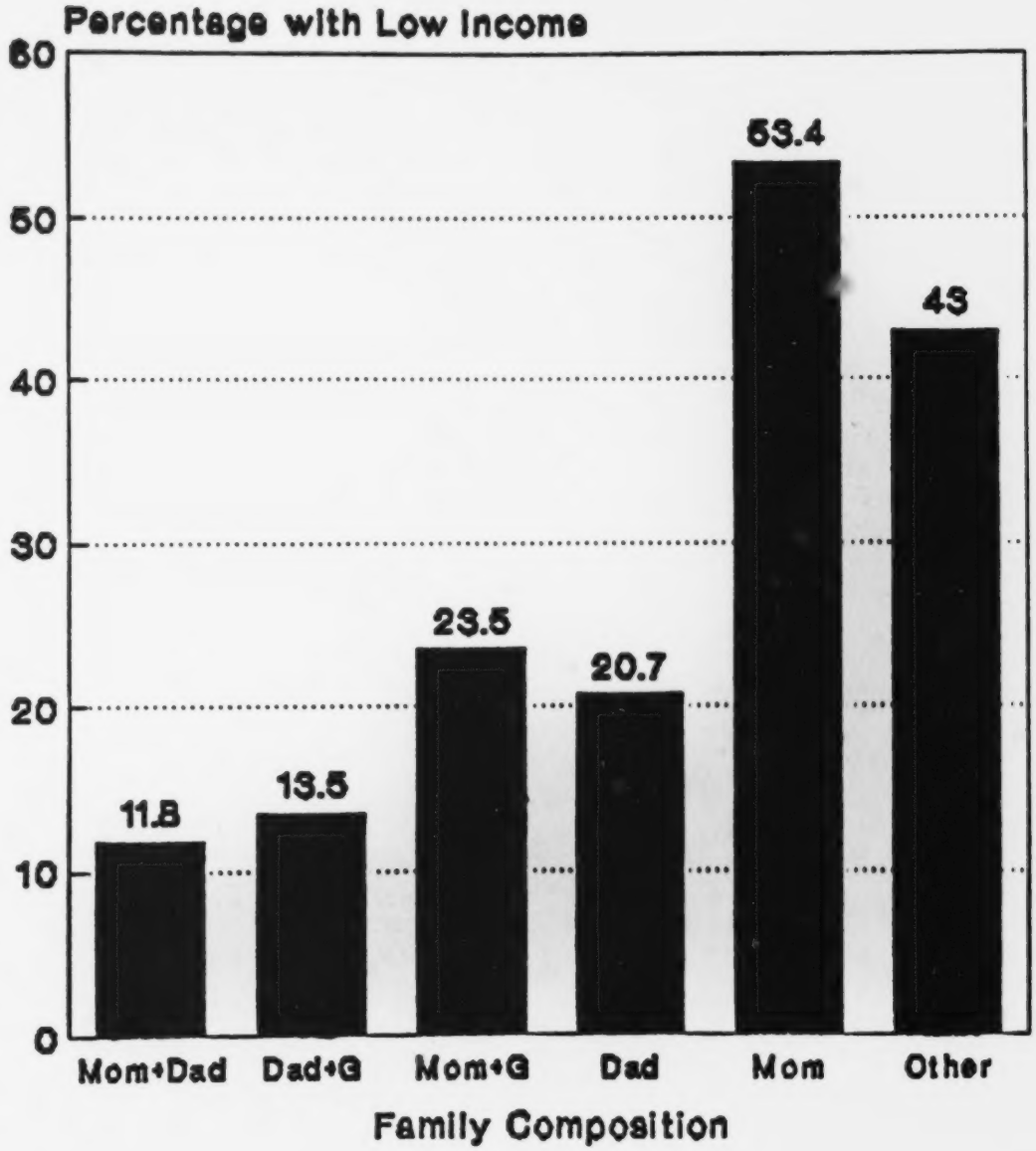
Table 1.2.--Percentage of 8th graders from different types of households, by selected background characteristics (continued)

Student Characteristics	SINGLE PARENT HOUSEHOLD[1]	TWO PARENT: MOTHER & FATHER IN HOUSEHOLD	TWO PARENT: MOTHER & GUARDIAN HOUSEHOLD	TWO PARENT: FATHER & GUARDIAN HOUSEHOLD	SINGLE PARENT: MOTHER/FEMALE GUARDIAN ONLY IN HOUSEHOLD	SINGLE PARENT: FATHER/MALE GUARDIAN ONLY IN HOUSEHOLD	SINGLE PARENT: OTHER RELATIVE OR NON-RELATIVE ONLY IN HOUSEHOLD
TOTAL	22.3	63.6	11.5	2.6	16.5	2.6	3.2
LANGUAGE PROFICIENCY							
Limited English	31.1	56.6	9.7	2.5	23.0	2.6	5.5
Non-Limited English	22.0	64.1	11.5	2.5	16.2	2.6	3.1
TEST QUARTILE							
Lowest Quartile	30.0	54.7	12.9	2.6	21.4	3.3	5.2
25-49%	23.8	60.1	12.9	3.1	17.5	2.4	3.9
50-75%	19.8	65.9	11.2	3.0	14.8	2.5	2.5
Highest Quartile	15.0	73.8	9.4	1.8	11.6	2.1	1.3
URBANICITY							
Urban	29.4	56.8	11.6	2.1	22.7	2.6	4.1
Suburban	19.5	66.3	11.6	2.7	14.1	2.8	2.5
Rural	20.5	65.3	11.4	2.8	14.7	2.3	3.5

[1]This column is the sum of columns 5, 6 and 7 (mother only, father only, and other relative or non-relative). "Other relative or non-relative" group is included in the single parent household category, even through there is no parent in the home, and it may include 2 people (e.g., grandparents).

SOURCE: U.S. Department of Education, National Center for Education Statistics, "National Education Longitudinal Study of 1988: Base Year Student Survey".

Figure 1.1 Percentage of Eighth Graders with Low Family Incomes (less than $15K) by Family Type



SOURCE: U.S. Dept. ED. NCES, NELS:88 BY

Table 1.3.--Percentage of those 8th graders who report repeating one or more grades in school, by age and selected background characteristics

Background Characteristics	REPEATED AT LEAST ONE GRADE[1]	REPEATED EXACTLY ONE GRADE[2]	REPEATED 2 OR MORE GRADES	REPEAT K'DRTN	REPEAT 1ST GR	REPEAT 2ND GR	REPEAT 3RD GR	REPEAT 4TH GR	REPEAT 5TH GR	REPEAT 6TH GR	REPEAT 7TH GR	REPEAT 8TH GR
TOTAL	17.7	87.5	12.5	12.9	25.8	17.1	13.2	9.3	8.6	8.7	11.7	9.4
AGE												
under 15	1.0	92.6	7.4	22.5	25.5	16.1	15.9	10.4	12.2	13.3	13.3	13.6
15	43.2	97.8	2.2	14.5	25.7	16.4	11.9	7.8	6.6	6.2	7.9	7.5
16 or more	87.3	58.8	41.2	6.9	26.2	18.6	16.2	13.2	13.4	15.4	21.6	13.8
SEX												
Male	21.3	86.8	13.3	13.6	24.2	16.6	13.0	10.0	9.0	9.9	12.9	9.8
Female	14.2	88.7	11.3	11.8	28.2	17.9	13.6	8.2	8.0	6.9	10.0	8.8
RACE/ETHNICITY												
Asian and Pacific Islander	11.5	92.6	7.4	17.2	19.8	22.7	12.7	7.5	8.5	5.8	4.1	13.0
Hispanic	22.6	84.8	15.2	9.1	25.4	14.2	18.1	13.3	10.6	10.7	10.8	10.9
Black	26.1	86.3	13.7	5.1	20.7	18.5	15.0	11.7	12.2	11.6	12.4	10.1
White	15.6	88.5	11.5	15.8	27.7	16.5	11.6	7.4	6.9	7.6	11.6	8.6
American Indian and Native Alaskan	28.8	86.8	13.2	16.3	21.3	19.1	9.8	17.4	13.8	6.7	15.1	12.1
SES QUARTILE												
Low 25%	31.3	82.3	17.7	10.1	27.1	18.0	14.3	9.9	10.3	9.9	13.7	10.6
25-49%	19.1	89.0	10.9	11.9	27.3	17.0	13.9	9.1	8.0	8.0	10.9	8.8
50-75%	13.4	92.2	7.8	15.3	23.5	16.9	11.3	9.3	6.8	8.0	10.4	8.7
High 25%	8.2	96.2	3.8	21.7	21.3	14.5	10.7	7.4	6.3	7.1	8.3	7.5
GRADES												
Low 25%	33.6	83.3	16.7	10.8	25.8	15.8	12.6	10.6	9.6	9.6	14.6	12.5
25-49%	21.3	91.2	8.8	13.4	24.1	17.9	15.0	7.6	8.3	8.7	9.0	7.9
50-75%	13.1	90.1	9.9	12.9	27.4	17.9	12.1	10.2	7.8	7.5	10.6	5.3
High 25%	5.7	92.7	7.3	21.8	29.6	17.5	13.9	5.3	6.6	6.3	8.1	4.6

[1]Column 1 was calculated as the percentage of all children (entire population).

[2]Columns 2-12 were calculated as percentage of children who repeated at least one grade (18% of population), and are not based on all children.

SOURCE: U.S. Department of Education, National Center for Education Statistics, "National Education Longitudinal Study of 1988: Base Year Student Survey".

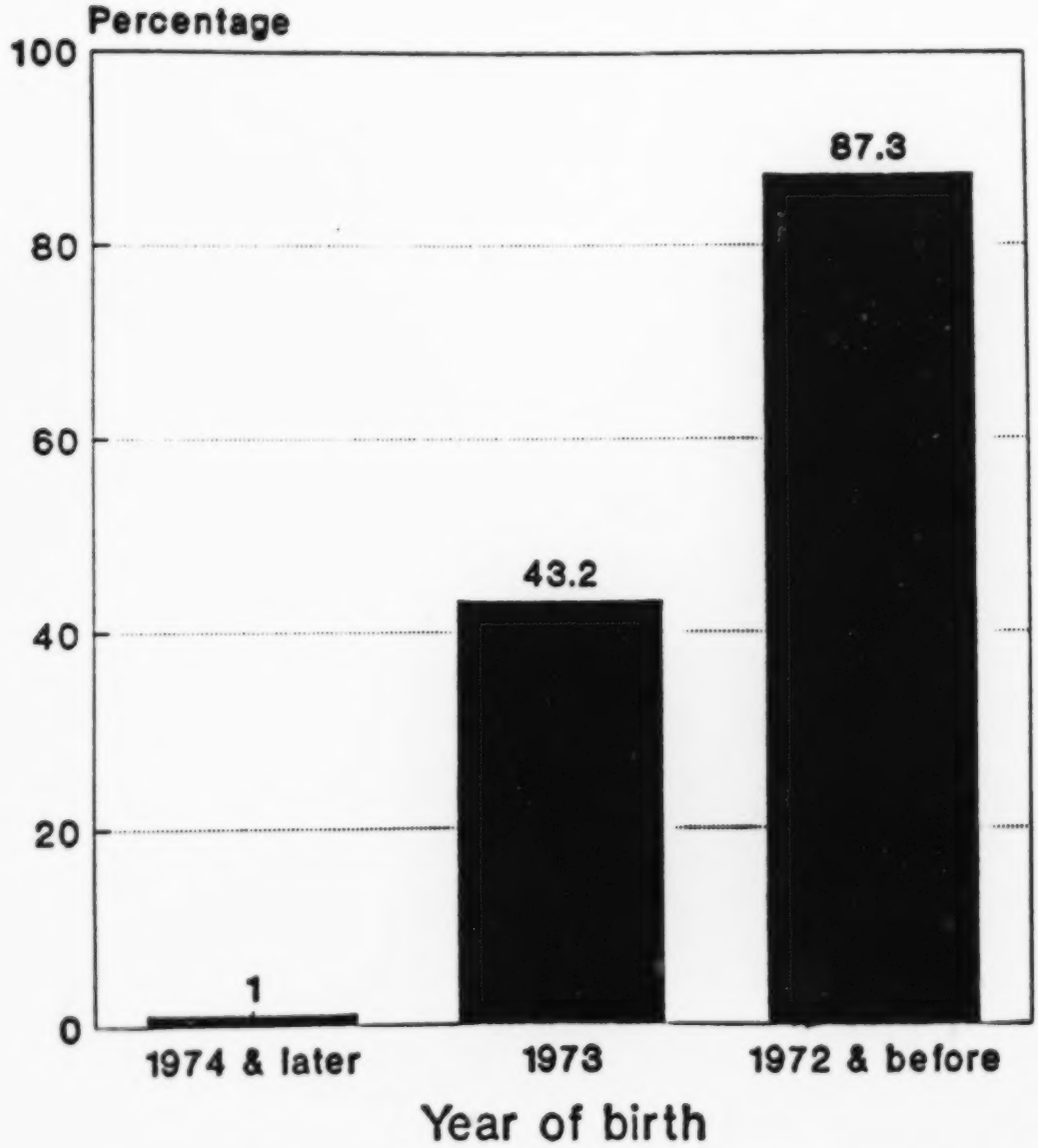
Table 1.3.--Percentage of those 8th graders who report repeating one or more grades in school, by age and selected background characteristics (continued)

Background Characteristics	REPEATED AT LEAST ONE GRADE[1]	REPEATED EXACTLY ONE GRADE[2]	REPEATED 2 OR MORE GRADES	REPEAT K'DRTN	REPEAT 1ST GR	REPEAT 2ND GR	REPEAT 3RD GR	REPEAT 4TH GR	REPEAT 5TH GR	REPEAT 6TH GR	REPEAT 7TH GR	REPEAT 8TH GR
TOTAL	17.7	87.5	12.5	12.9	25.8	17.1	13.2	9.3	8.6	8.7	11.7	9.4
LANGUAGE PROFICIENCY												
Limited English	29.7	80.1	19.9	12.7	25.2	22.3	15.4	13.5	9.5	11.3	16.1	17.2
Non-Limited English	17.4	87.9	12.1	13.0	25.9	16.9	13.2	9.2	8.6	8.6	11.5	9.0
PARENT EDUCATION												
Less Than High School	35.0	80.3	19.7	8.4	27.6	19.3	14.9	9.9	10.9	10.7	14.3	8.9
High School Graduate	21.8	87.9	12.1	11.9	27.1	15.5	12.7	8.3	8.8	7.1	12.4	11.8
Some college	17.4	88.2	11.9	13.7	25.9	17.4	13.6	9.6	7.9	9.2	11.0	8.7
College graduate	9.6	95.3	4.7	18.3	20.2	16.9	11.9	10.1	6.2	7.5	8.0	7.0
MA degree/equivalent	6.9	96.8	3.2	26.7	19.3	18.7	9.4	6.4	6.8	4.7	8.2	3.0
PhD. degree/eqivalent	7.4	98.2	1.8	21.0	27.4	10.1	5.6	8.1	6.1	8.3	5.4	12.4
FAMILY COMPOSITION												
Mother & father	14.1	88.8	11.2	14.6	27.2	17.0	13.8	8.9	8.0	7.8	9.3	8.6
Mother & guardian	22.7	88.3	11.7	10.6	26.2	14.7	13.0	9.1	7.4	8.6	15.2	10.3
Father & guardian	23.9	83.2	16.8	15.0	27.6	16.7	12.8	6.2	8.0	7.9	15.5	9.4
Mother only	23.5	85.8	14.2	10.5	23.8	18.9	12.6	10.4	9.6	9.6	12.1	10.2
Father only	23.7	90.9	9.1	15.1	17.5	12.0	8.6	7.4	9.1	14.4	19.8	5.9
Other relative or non-relative	31.5	81.3	18.7	10.7	22.8	20.4	13.1	11.6	14.2	13.5	16.7	12.7
SCHOOL SECTOR												
Public	18.8	87.1	12.9	12.5	25.9	17.2	13.1	9.3	8.6	8.7	12.0	9.7
Catholic	9.7	93.6	6.4	13.3	26.3	16.7	14.6	8.4	11.2	10.5	7.2	1.9
Independent	11.5	96.6	3.4	28.6	13.9	12.4	13.3	7.9	6.5	10.0	10.6	10.8
Other Private	9.4	90.8	9.2	27.0	22.4	18.0	14.3	10.7	2.9	7.7	9.6	10.3

[1]Column 1 was calculated as the percentage of all children (entire population).
[2]Columns 2-12 were calculated as percentage of children who repeated at least one grade (18% of population), and are not based on all children.

SOURCE: U.S. Department of Education, National Center for Education Statistics, "National Education Longitudinal Study of 1988: Base Year Student Survey".

Figure 1.2. Percent of Eighth Graders Who Repeated At Least One Grade, by Year of Birth



SOURCE: U.S. Dept. ED. NCES, NELS:88 BY

Table 1.4.--Percentage of eighth graders with one or more risk factors*, by selected background characteristics

Background Characteristics	No Risk Factors	One Risk Factor	Two or More Risk Factors
TOTAL	53.3	26.3	20.4
SEX			
Male	53.2	27.0	19.7
Female	53.4	25.5	21.1
RACE/ETHNICITY			
Asian/Pacific Islander	57.5	27.3	15.2
Hispanic	32.0	31.5	36.6
Black	28.4	30.7	40.9
White	61.5	24.5	14.0
American Indian/ Alaskan Native	35.3	33.2	31.5

* Risk factors include single parent family, low parent education, limited English proficiency, low family income, sibling dropout, and home alone more than 3 hours on weekdays.

SOURCE: U.S. Department of Education, National Center for Education Statistics, "National Education Longitudinal Study of 1988: Base Year Student Survey".

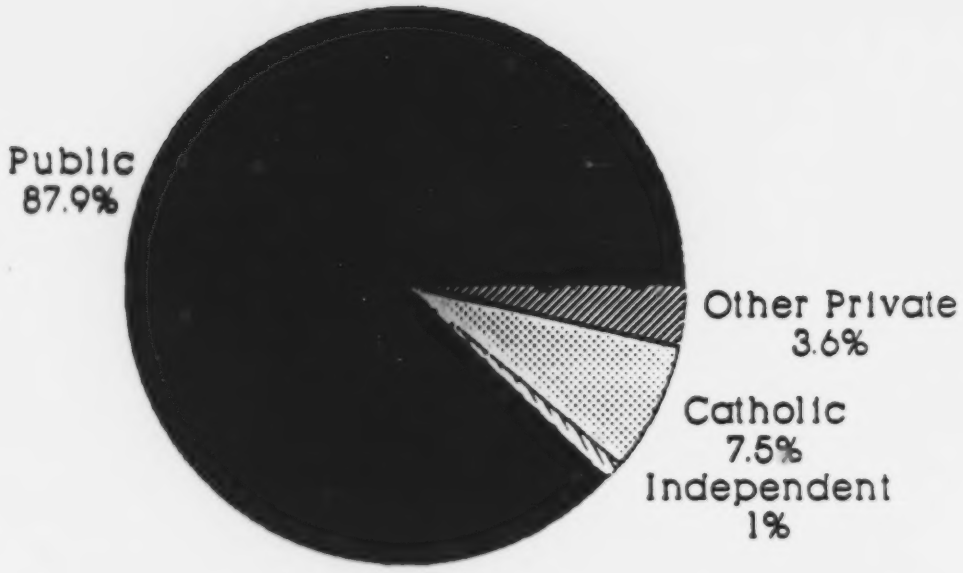
Table 1.5.--Percentage of eighth graders with various risk factors, by selected background characteristics

Background Characteristics	Parent is Single	Parents Have No H.S. Diploma[1]	Limited English Proficiency	Income Less Than $15,000	Has a Sibling Who Dropped Out	Home Alone More Than 3 Hrs.
TOTAL	22.3	10.5	2.3	21.3	10.0	13.6
SEX						
Male	22.0	10.1	2.4	20.0	10.3	14.3
Female	22.5	11.0	2.2	22.2	9.8	13.0
RACE/ETHNICITY						
Asian/Pacific Islander	14.2	8.8	7.1	17.8	6.1	15.9
Hispanic	23.4	33.4	8.8	37.5	16.0	16.3
Black	46.5	15.8	1.6	47.0	13.0	19.5
White	17.7	6.2	0.8	14.1	8.8	12.0
American Indian & Native Alaskan	31.1	13.4	8.6	40.1	15.1	18.6

[1]Neither of the student's parents have a high school diploma.

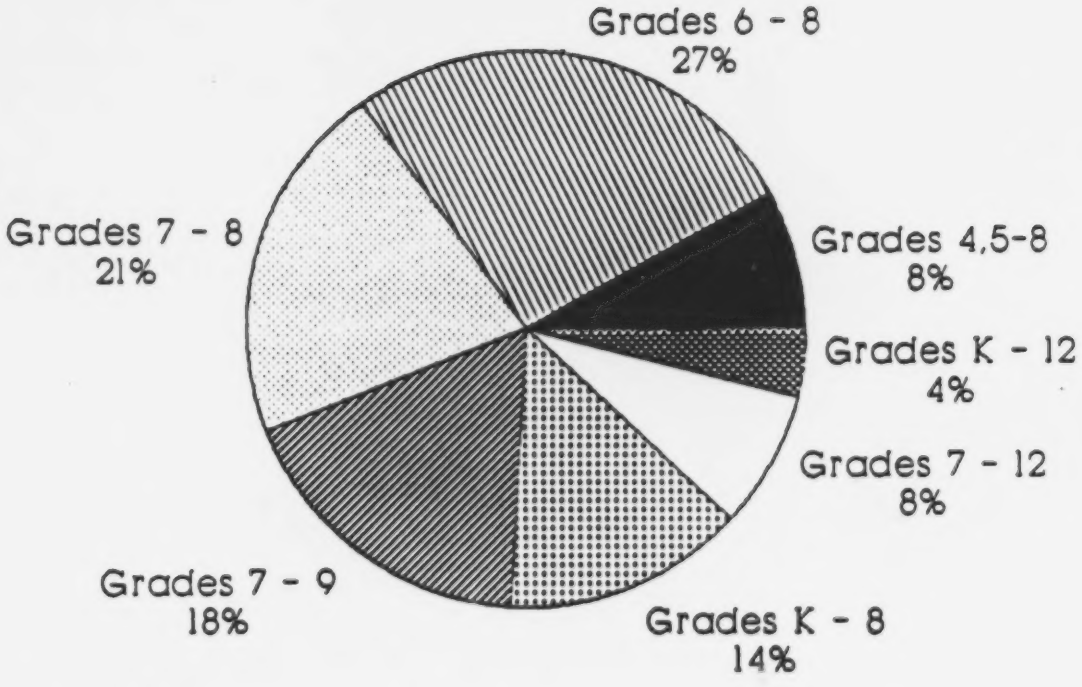
SOURCE: U.S. Department of Education, National Center for Education Statistics, "National Education Longitudinal Study of 1988: Base Year Student Survey".

Figure 1.3 Percentage of Eighth Graders Enrolled in Public and Private Schools



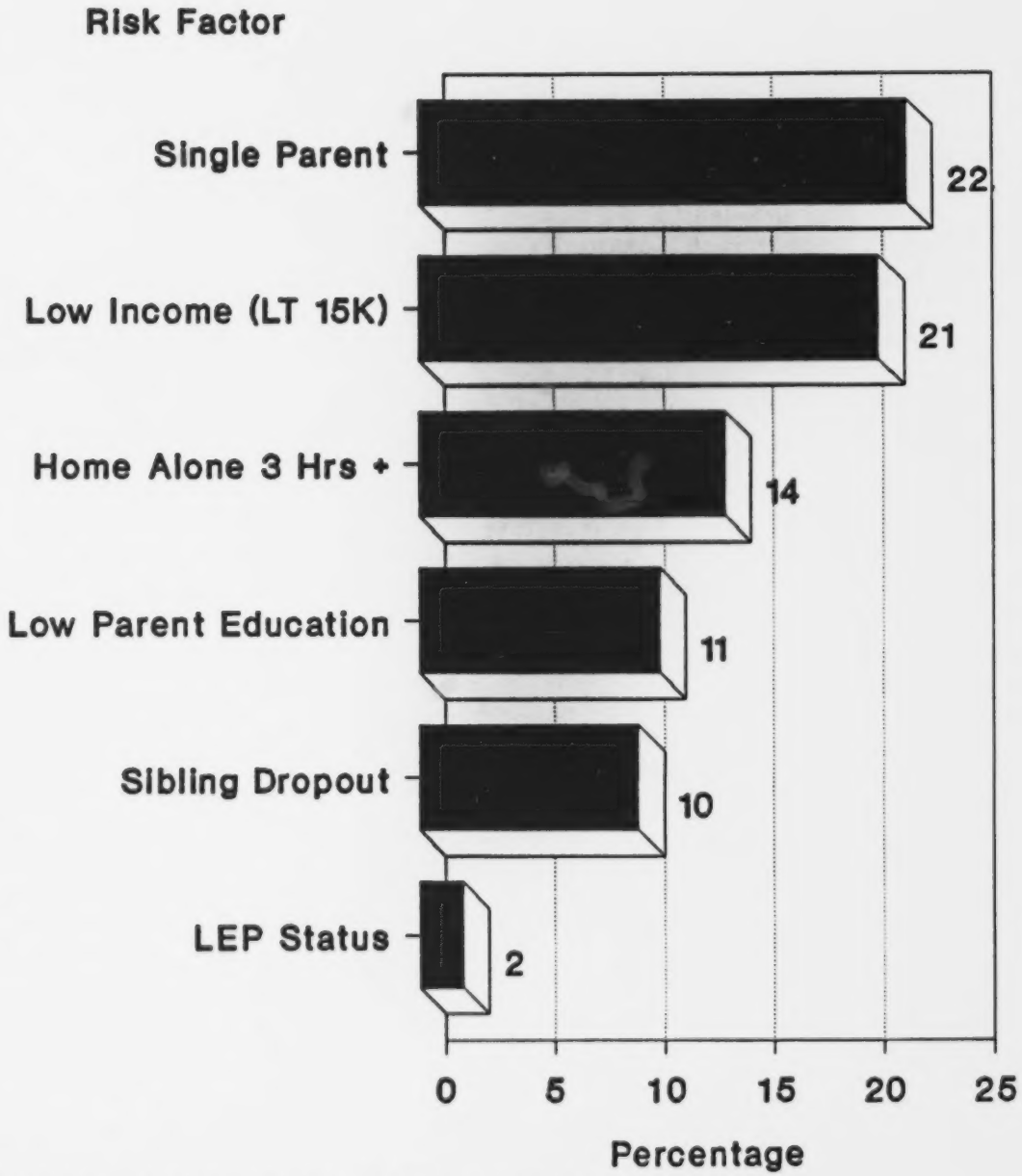
SOURCE: U.S. Dept. ED. NCES, NELS:88 BY

Figure 1.4 Percentage of Eighth Graders in Schools with Various Grade Spans



SOURCE: U.S. Dept. ED. NCES, NELS:88 BY

Figure 1.5 Percentage of Eighth Graders with Various Risk Factors



SOURCE: U.S. Dept. ED. NCES, NELS:88 BY

2. Their school experiences: achievement; perceptions of their school environment.

Figure 2.1: Percentage of NELS:88 eight graders proficient at each mathematics level

Figure 2.2: Percentage of NELS:88 eighth graders proficient at each mathematics level by race/Hispanic ethnicity

Figure 2.3: Percentage of eighth graders proficient at each reading level

Figure 2.4: Percentage of NELS:88 eighth graders proficient at each reading level by race/Hispanic ethnicity

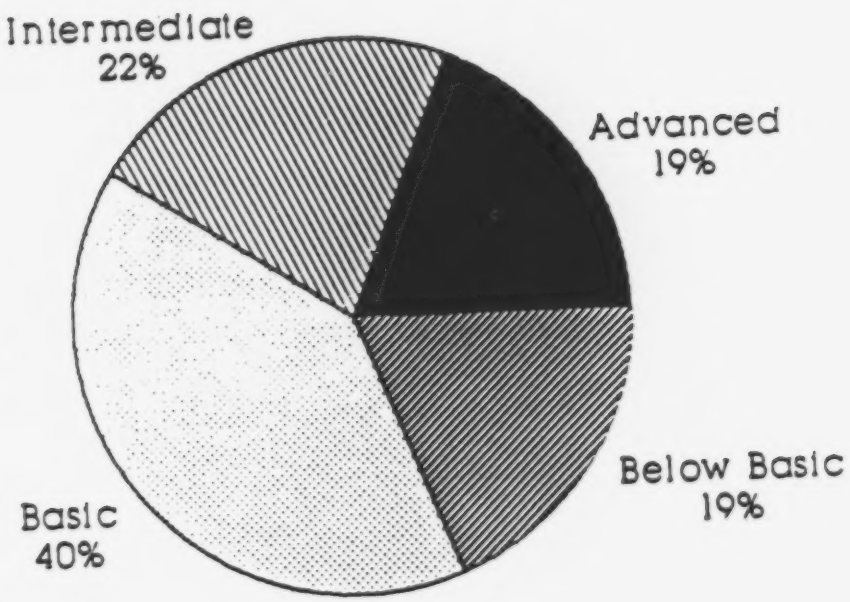
Table 2.8: Percentage of eighth graders agreeing or strongly agreeing with various statements about their schools, by selected background characteristics

Figure 2.5: Percentage of NELS:88 eighth graders in low and high SES groups who are proficient in advanced mathematics, by race

Figure 2.6: Percentage of eighth graders in low and high SES groups who fail to show basic reading skills, by race

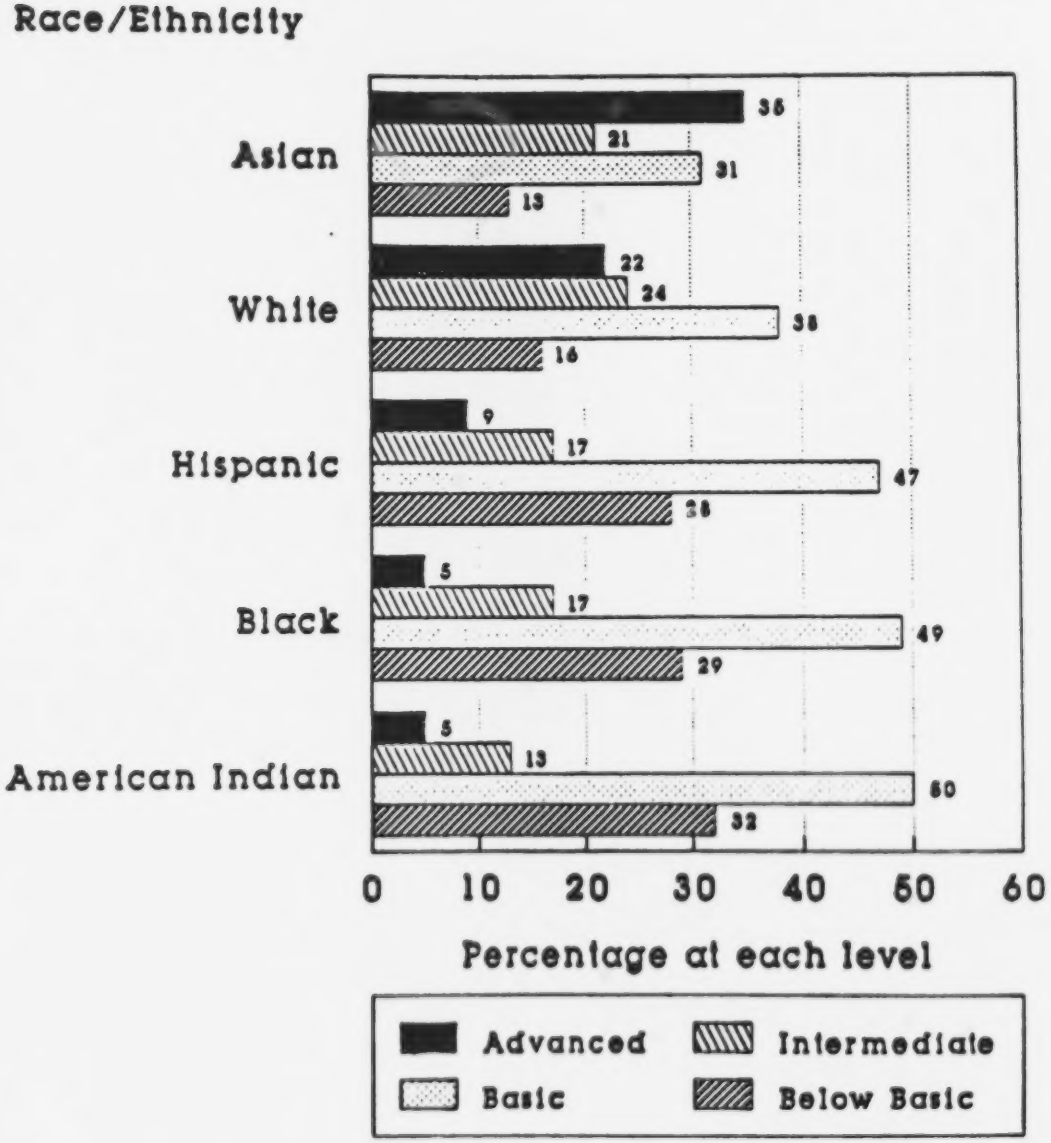
Table 2.9: Percentage of eighth graders reporting various safety-related occurrences in their school, by selected background characteristics

Figure 2.1 Percentage of All Students Proficient at Each Mathematics Level



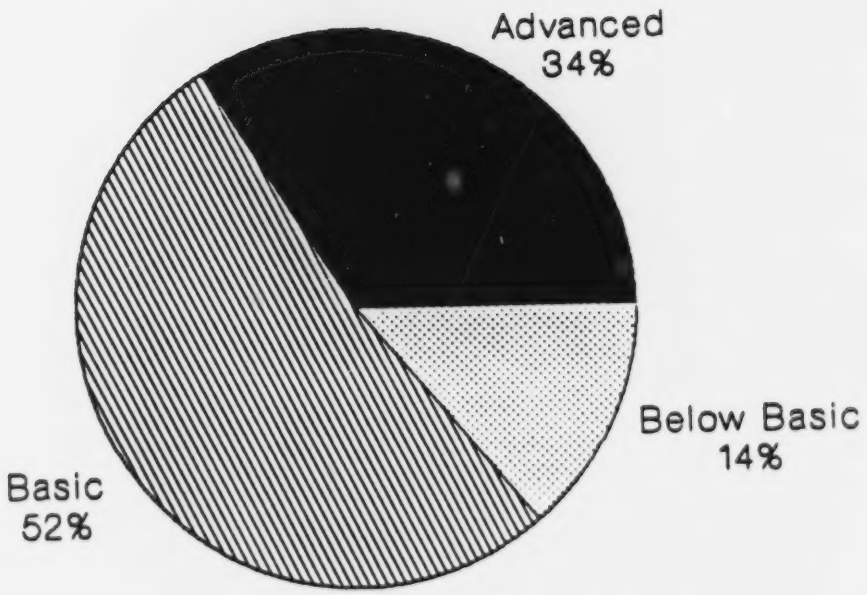
SOURCE: U.S. Dept. ED. NCES, NELS:88 BY

Figure 2.2 Percentage of Eighth Graders Proficient at Each Mathematics Level, by Race



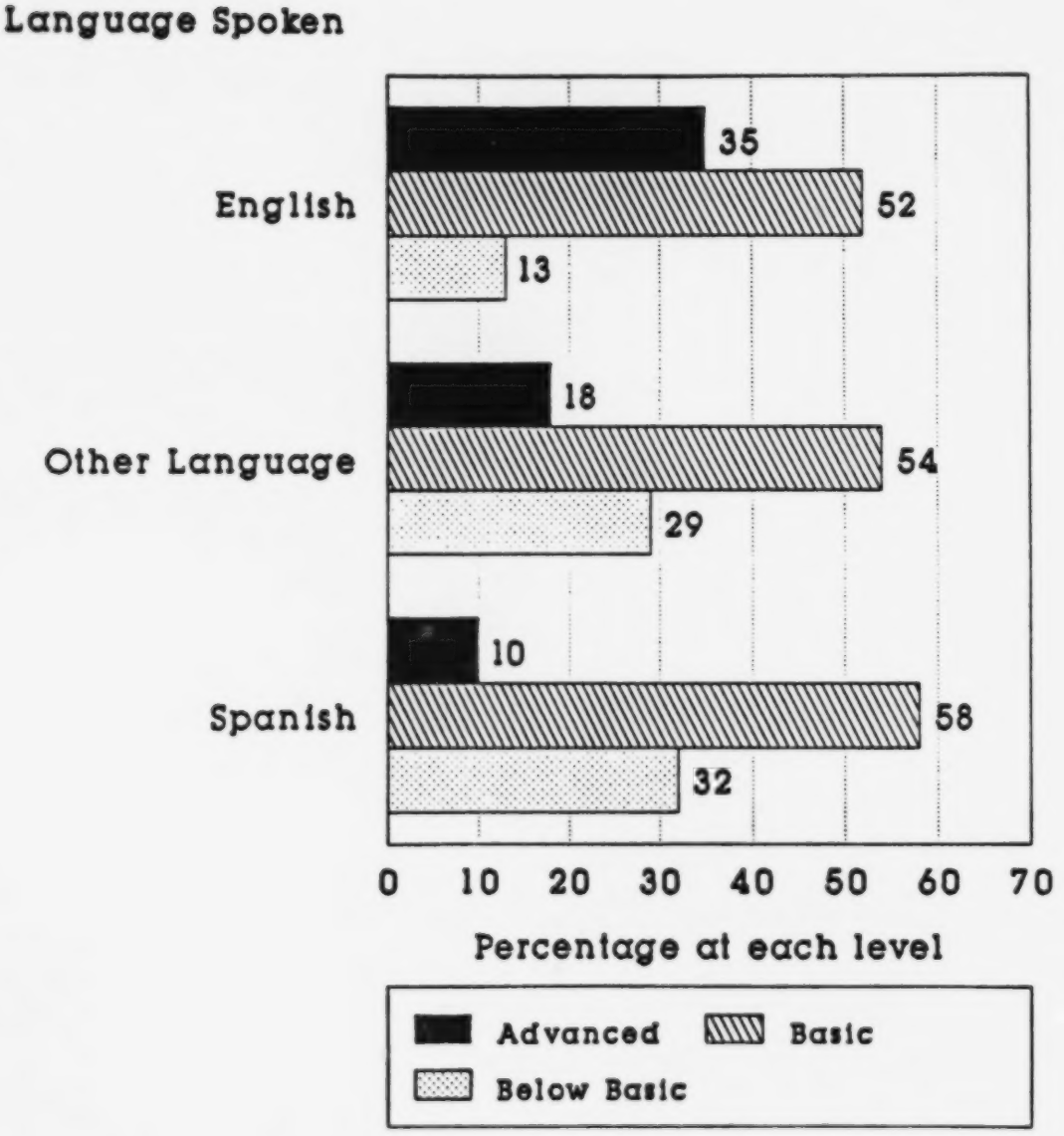
SOURCE: U.S. Dept. ED. NCES, NELS:88 BY

Figure 2.3 Percentage of All Students Proficient at Each Reading Level



SOURCE: U.S. Dept. ED., NCES, NELS:88 BY

Fig. 2.4 Percentage of Eighth Graders Proficient at Each Reading Level, by Language Spoken



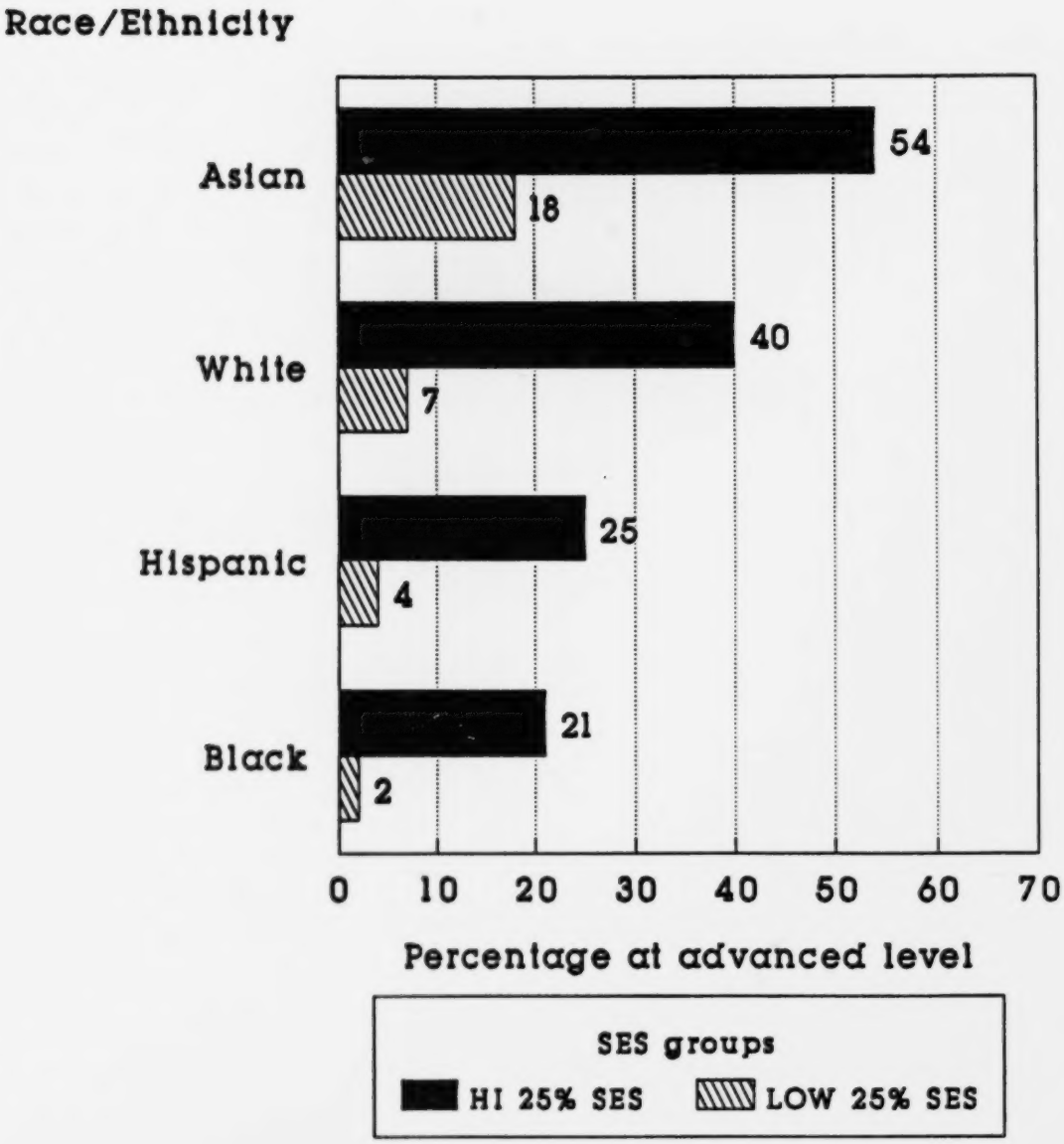
SOURCE: U.S. Dept. ED. NCES, NELS:88 BY

Table 2.8.--Percentage of eighth graders agreeing or strongly agreeing with various statements about their schools, by selected background characteristics

Background Characteristics	Statements About Schools						
	Students & Teachers Get Along	There is Real School Spirit	Discipline is Fair	The Teaching is Good	Teachers are Interested in Students	Teachers Praise my Effort	Teachers Really Listen to me
TOTAL	67.1	68.6	69.1	80.2	75.2	63.3	68.4
SEX							
Male	67.6	67.2	67.3	78.9	74.9	63.0	66.9
Female	66.5	69.9	70.9	81.5	75.6	63.5	69.9
RACE/ETHNICITY							
Asian and Pacific Islander	73.0	66.7	72.5	83.4	78.6	70.8	74.9
Hispanic	66.4	64.9	70.7	81.3	76.8	70.7	70.6
Black	60.5	65.0	65.0	80.0	76.6	72.1	73.3
White	68.2	69.8	69.7	80.0	74.7	60.3	67.1
American Indian and Native Alaskan	65.2	67.4	63.5	76.7	68.5	63.3	62.1
SES QUARTILE							
Lowest Quartile	64.3	67.9	67.1	78.8	74.0	66.8	68.9
25-49%	65.5	69.5	68.0	79.0	74.3	62.3	66.8
50-74%	67.0	68.4	68.6	80.0	75.2	61.0	67.1
Highest Quartile	71.5	68.7	72.7	83.0	77.4	63.0	70.9
GRADES							
Lowest Quartile	57.1	63.1	60.6	71.9	66.7	56.4	58.3
25-49%	64.4	68.2	67.2	79.2	72.7	61.9	66.1
50-74%	70.2	69.9	71.9	82.8	77.0	64.6	70.8
Highest Quartile	75.2	72.6	75.6	86.2	83.0	68.9	77.0
SCHOOL DAYS MISSED							
None	70.4	71.8	71.4	83.1	78.0	64.7	71.5
1 or 2 Days	66.3	68.1	69.4	80.0	74.5	63.1	68.0
3 or more Days	61.6	63.5	64.5	75.1	70.8	59.5	62.6
TIMES LATE FOR SCHOOL							
None	70.3	71.7	72.4	82.9	77.8	64.2	71.4
1 or 2 Days	64.7	66.4	66.9	78.9	73.2	62.7	65.5
3 or more Days	55.5	58.2	57.4	69.9	66.1	57.6	58.3
SCHOOL TYPE							
Public	65.6	68.1	68.9	79.6	73.9	62.3	67.5
Catholic	75.4	70.5	69.4	82.9	83.0	66.9	73.3
Independent	85.9	77.3	77.2	92.7	89.6	79.1	80.2
Other Private	79.0	73.1	71.4	87.2	87.8	73.7	77.6

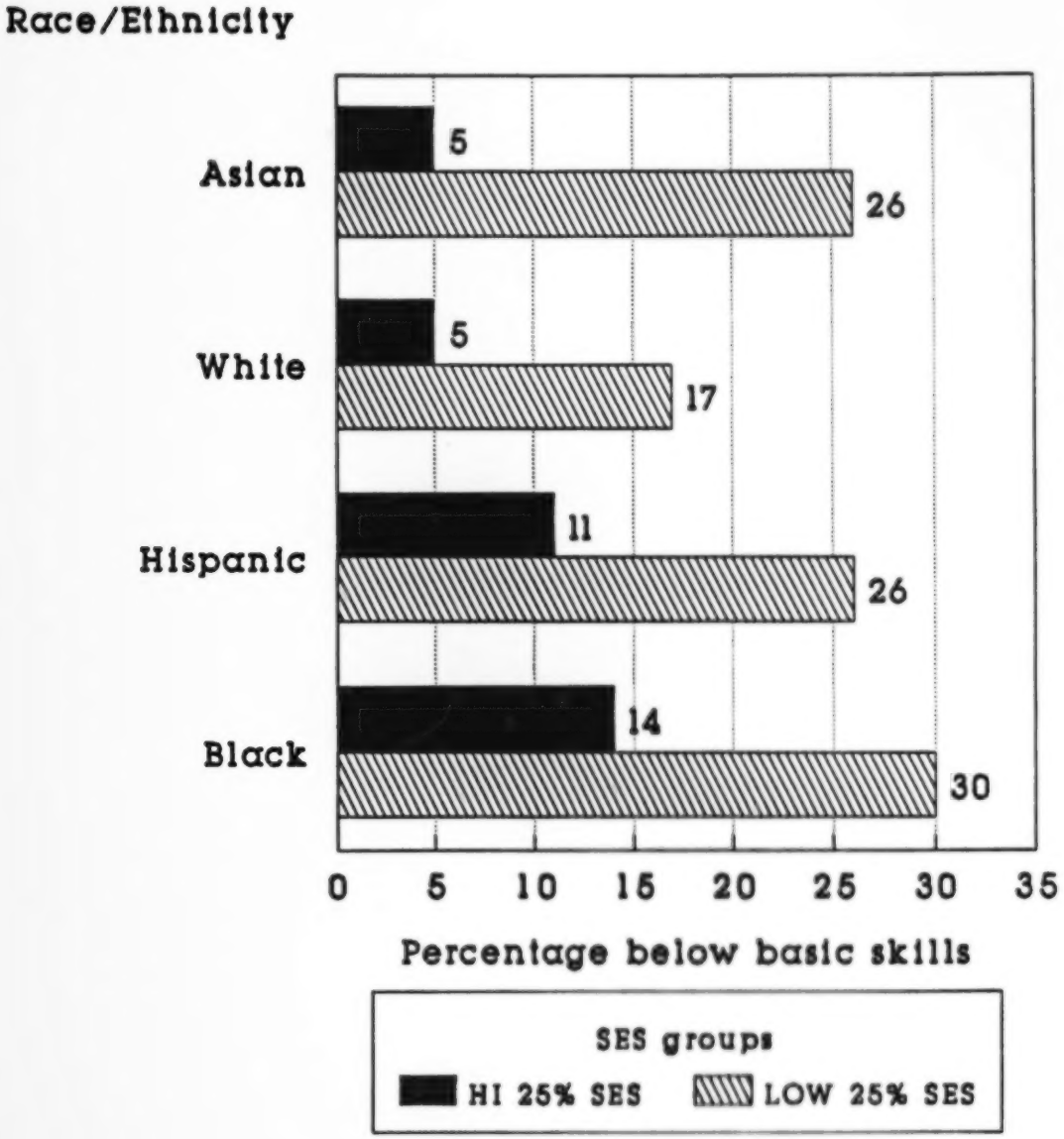
SOURCE: U.S. Department of Education, National Center for Education Statistics, "National Education Longitudinal Study of 1988: Base Year Student Survey".

Fig. 2.5 Percentage of Eighth Graders in Low & High SES Groups Who Are Proficient in Advanced Mathematics, by Race



SOURCE: U.S. Dept. ED. NCES, NELS:88 BY

Fig 2.6 Percentage of Eighth Graders in Low & High SES Groups Who Fail to Show Basic Reading Skills, by Race



SOURCE: U.S. Dept. ED. NCES, NELS:88 BY

Table 2.9--Percentages of eighth graders reporting various safety-related occurrences in their school, by selected background characteristics

Background Characteristics	I Fought with a student	Something was Stolen from me	Someone Offered to Sell me Drugs	Someone Threatened to Hurt me	I Don't Feel Safe at School
TOTAL	22.5	49.1	10.0	27.8	11.8
SEX					
Male	33.9	52.1	12.2	33.0	13.3
Female	11.3	46.1	7.9	22.7	10.4
RACE/ETHNICITY					
Asian and Pacific Islander	18.9	47.9	4.8	21.3	11.7
Hispanic	25.3	49.1	14.3	23.0	16.1
Black	30.3	57.5	7.6	24.9	18.0
White	20.6	47.6	9.9	29.3	9.9
American Indian and Native Alaskan	36.6	52.1	16.4	24.4	18.0
SES QUARTILE					
Lowest Quartile	30.7	50.9	11.8	28.2	15.3
25 - 49%	23.8	50.7	10.1	29.4	13.4
50 - 75%	20.3	48.7	10.4	27.6	10.9
Highest Quartile	15.6	46.3	7.7	25.9	7.9
SCHOOL TYPE					
Public	23.2	50.2	11.0	29.2	12.5
Catholic	18.4	41.0	2.6	17.3	7.6
Independent Private	16.2	51.7	6.6	18.9	5.7
Other Private	16.4	38.2	2.4	18.7	5.9
URBANICITY					
Urban	24.7	51.8	10.4	27.0	15.3
Suburban	21.3	47.0	10.3	27.2	10.7
Rural	22.5	49.9	9.4	29.2	10.7

SOURCE: U.S. Department of Education, National Center for Education Statistics, "National Education Longitudinal Study of 1988: Base Year Student Survey".

3. The wider context: time spent outside of school.

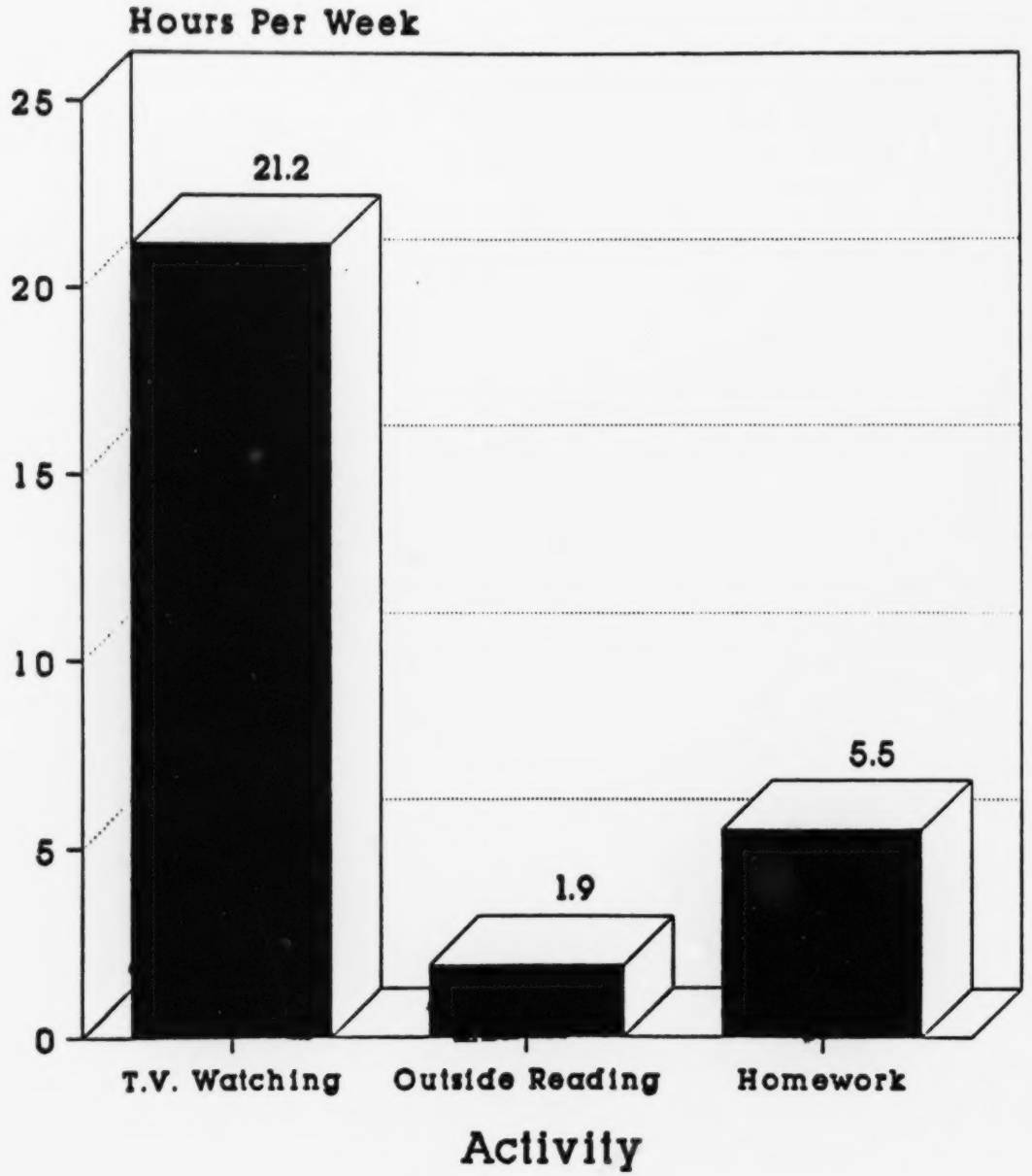
Figure 3.1: Average hours per week spent on various activities

Table 3.1: Avg. number of hours spent per week on various activities

Figure 3.2: Hour per week spent on various activities by school sector (control)

Table 3.3: Percentage of eighth graders spending various numbers of hours after school each day at home with no adult present

Figure 3.1 Average Hours Per Week Spent on Various Activities



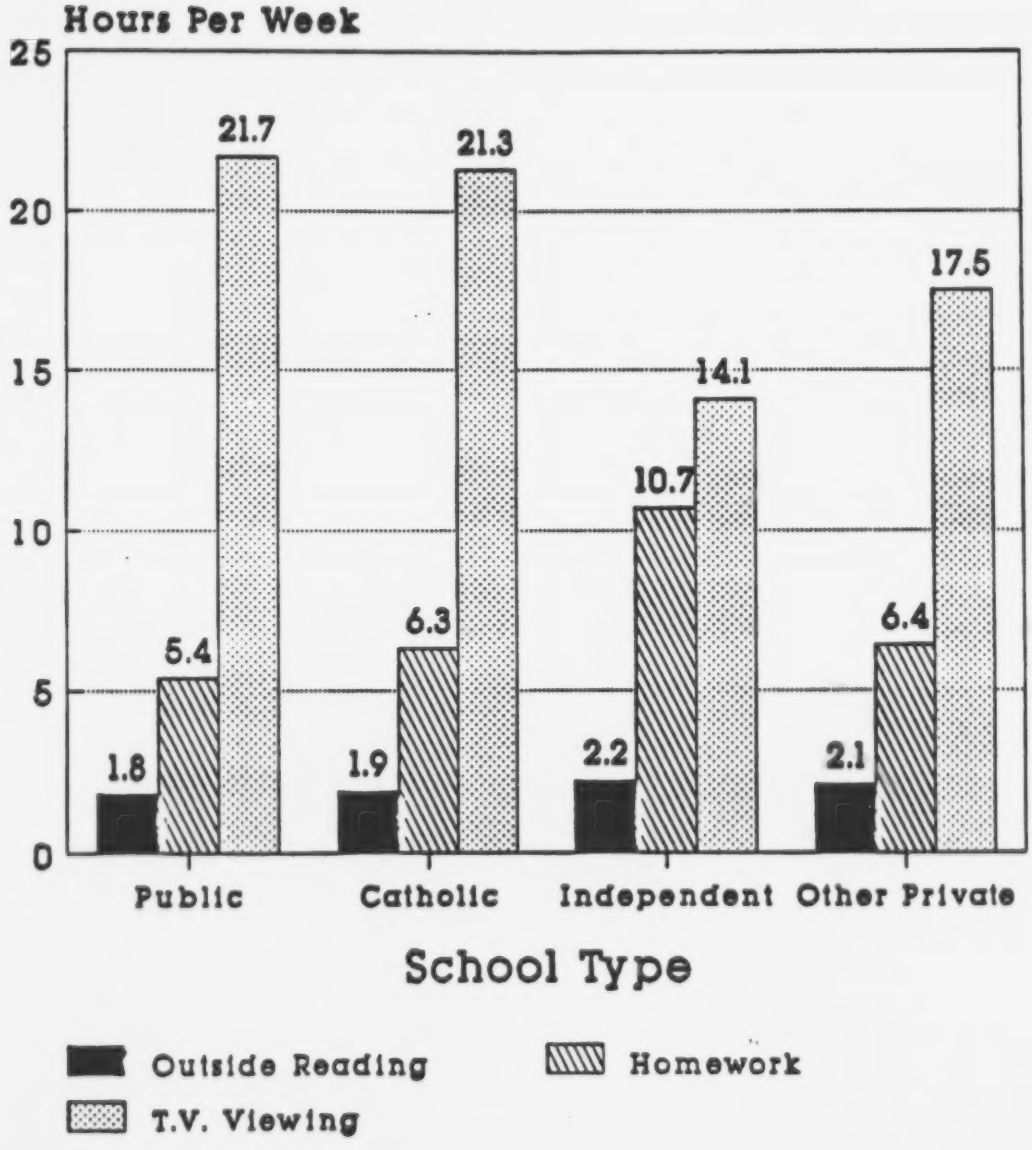
SOURCE: U.S. Dept. ED. NCES, NELS:88 BY

Table 3.1.--Average number of hours spent per week on outside reading, homework, and television watching, by selected background characteristics.

Student Characteristics	Average Hours Spent Per Week		
	Outside Reading	Home-Work	TV Total
TOTAL	1.8	5.6	21.4
SEX			
Male	1.5	5.4	22.3
Female	2.1	5.7	21.2
RACE/ETHNICITY			
Asian and Pacific Islander	1.9	6.7	21.4
Hispanic	1.6	4.7	22.6
Black	1.6	5.2	27.6
White	1.9	5.7	20.8
American Indian and Native Alaskan	1.7	4.7	23.3

SOURCE: U.S. Department of Education, National Center for Education Statistics, "National Education Longitudinal Study of 1988: Base Year Student Survey".

Figure 3.2 Hours Per Week Spent on Various Activities By School Type



SOURCE: U.S. Dept. ED. NCES, NELS:88 BY

Table 3.3.--Percentage of eighth graders spending various numbers of hours after school each day at home with no adult present, by selected background characteristics

Background Characteristics	None Never Happens	Less Than One Hour	1 - 2 Hours	2 - 3 Hours	More Than 3 Hours
	Number of Hours				
TOTAL	13.3	32.4	27.8	12.9	13.6
RACE/ETHNICITY					
Asian and Pacific Islander	16.7	29.0	25.8	12.6	15.9
Hispanic	20.7	29.0	22.8	11.2	16.3
Black	16.2	28.1	23.2	12.8	19.5
White	11.6	33.8	29.5	13.1	12.0
American Indian/ Native Alaskan	16.0	30.8	21.1	13.3	18.8
SES QUARTILE					
Lowest Quartile	18.6	31.5	22.9	9.9	17.2
25-49%	13.6	32.1	27.2	13.0	14.2
50-74%	11.0	29.9	29.6	15.6	14.0
Highest Quartile	10.3	36.2	31.3	13.0	9.3
SCHOOL TYPE					
Public	13.0	32.1	27.9	13.0	14.0
Catholic	13.4	34.0	26.4	13.9	12.3
Independent	15.3	36.7	30.5	9.7	7.9
Other Private	20.1	34.6	27.8	8.7	8.8

SOURCE: U.S. Department of Education, National Center for Education Statistics, "National Education Longitudinal Study of 1988: Base Year Student Survey".

4. The future: the transition to high school—aspirations and choices.

Figure 4.1: Percentage of NELS:88 eighth graders planning to attend different high school sectors (source of control) by eighth grade school sector

Table 4.2: Percentage of NELS:88 eighth graders planning to attend various types of high schools, by selected background characteristics

Figure 4.2: Percentage of NELS:88 eighth graders planning to enroll in various high school programs

Table 4.3: Percentage planning to enroll in various high school programs by background characteristics

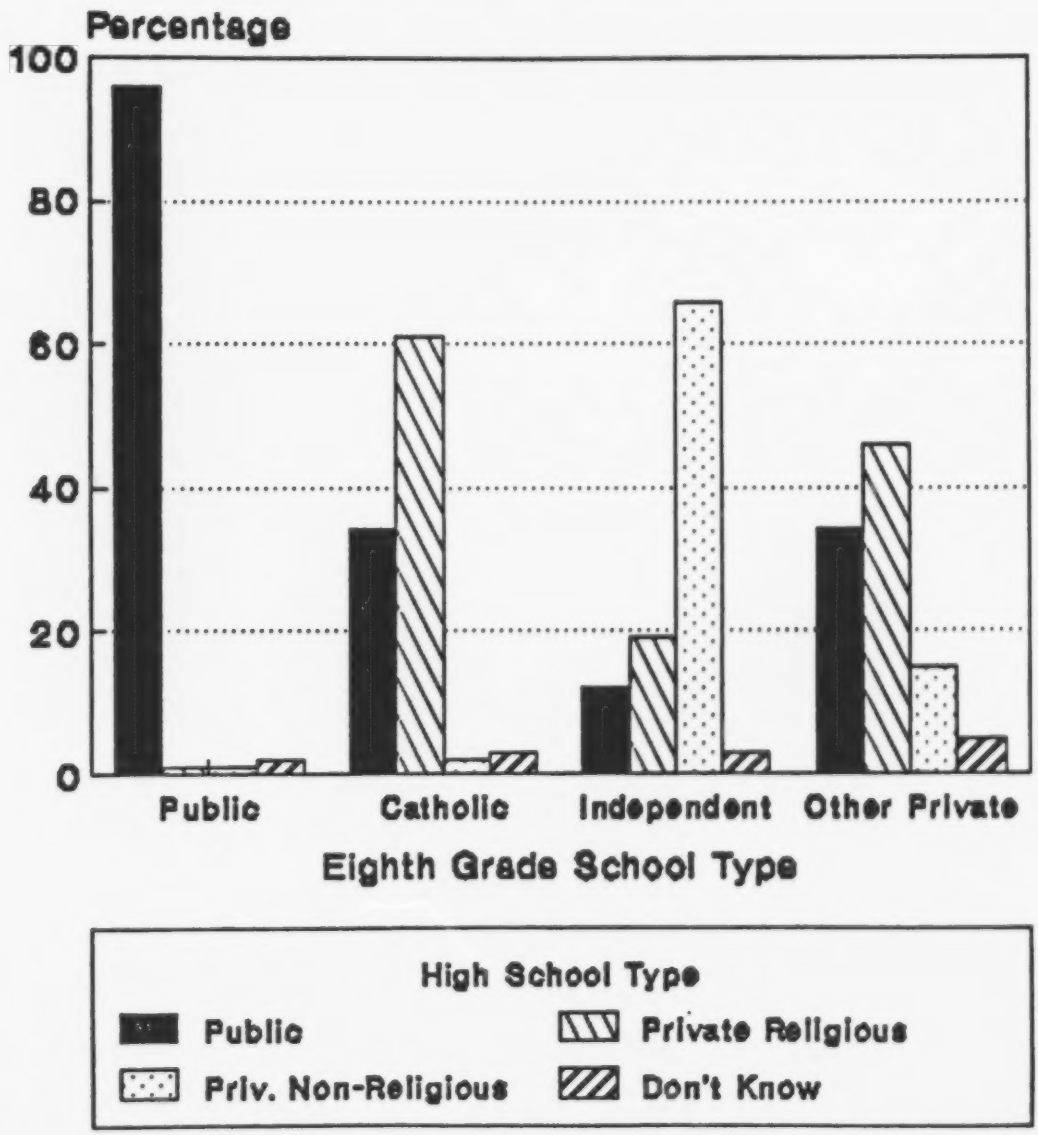
Table 4.5: Percentage of NELS:88 eighth graders who never discussed various high school programs with various adults

Table 4.6: Percentage of students aspiring to various occupations by student characteristics

Table 4.7: Percentage of students aspiring to various education levels by student characteristics

Figure 4.3: Percentage of NELS:88 eighth graders with educational problems, by number of risk factors

Fig. 4.1 Percentage of Eighth Graders Planning to Attend High School Types, by Eighth Grade School Type



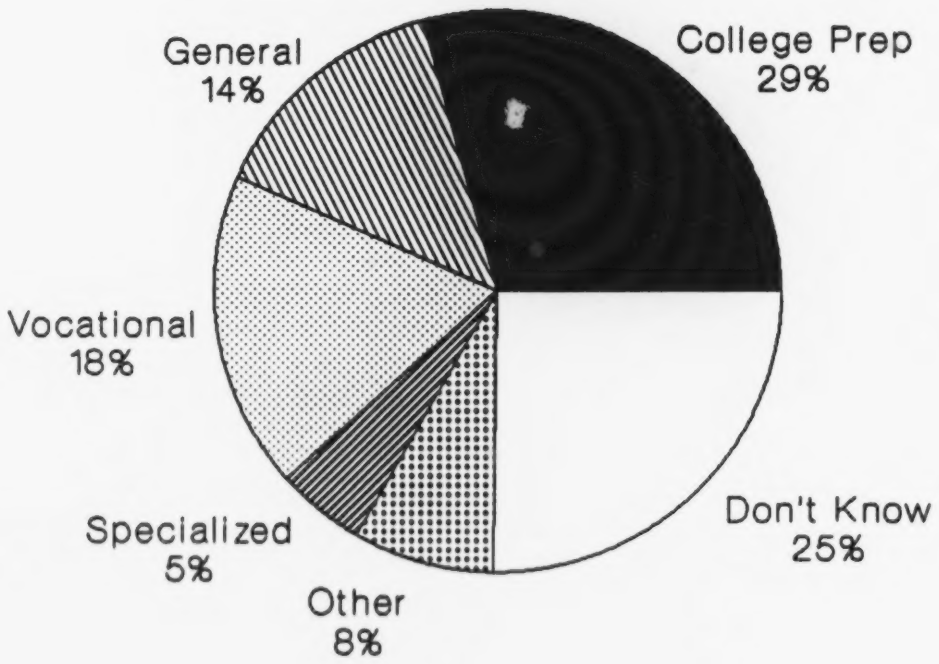
SOURCE: U.S. Dept. ED. NCES, NELS:88 BY

Table 4.2.--Percentage of eighth graders planning to attend various types of high schools by selected background characteristics

School Characteristics	High School Choice			
	Public	Private Religious	Private Non-Religious	Don't Know
TOTAL	88.1	7.5	1.8	2.5
RACE/ETHNICITY				
Asian and Pacific Islanders	80.7	12.0	3.5	3.7
Hispanic	87.8	7.2	0.9	4.1
Black	90.0	4.1	1.5	4.5
White	88.4	8.1	1.9	1.7
American Indian and Native Alaskans	84.5	5.3	2.2	8.0
PARENTS' EDUCATION				
Did Not Finish High School	93.6	1.6	0.3	4.5
High School Graduate	91.3	5.0	0.7	2.8
High School Plus Some College	90.4	6.6	1.0	2.1
College Graduate	81.8	12.8	3.5	1.9
Graduate Degree	81.9	12.5	4.3	1.4
SES QUARTILE				
Lowest Quartile	93.2	2.2	0.5	4.1
25-49%	92.0	5.2	0.7	2.1
50-74%	87.9	8.8	1.3	2.1
Highest Quartile	79.5	13.9	4.8	1.8

SOURCE: U.S. Department of Education, National Center for Education Statistics, "National Education Longitudinal Study of 1988: Base Year Student Survey".

Figure 4.2 Percentage of Eighth Graders Planning to Enroll in Various High School Programs



SOURCE: U.S. Dept. ED. NCES, NELS:88 BY

Table 4.3.--Percentage of eighth graders planning to enroll in various high school programs by selected background characteristics

Student Characteristics	High School Programs					
	College Preparatory Academic	Vocational Technical Business	General High School Program	Specialized Program	Other	Don't Know
TOTAL	29.2	18.0	14.3	5.4	8.1	25.1
SEX						
Male	28.8	19.6	14.0	4.3	8.5	24.8
Female	29.6	16.4	14.5	6.5	7.6	25.4
RACE/ETHNICITY						
Asian and Pacific Islander	37.1	17.6	9.7	4.0	6.9	24.6
Hispanic	22.5	22.3	10.6	5.3	10.4	29.0
Black	24.7	25.9	9.7	5.6	10.9	23.1
White	30.9	15.9	16.0	5.5	7.2	24.6
American Indian and Native Alaskan	17.2	22.8	9.6	7.2	8.7	34.6
SES QUARTILE						
Lowest Quartile	17.4	23.4	13.5	4.7	9.9	31.2
25-49%	25.1	20.7	14.0	4.6	9.0	26.7
50-74%	31.1	16.9	14.7	6.1	8.2	22.9
Highest Quartile	43.0	11.1	14.8	6.3	5.2	19.6
GRADES						
Lowest Quartile	11.3	21.8	16.7	5.8	9.9	34.6
25-49%	19.7	21.9	15.8	6.9	9.9	26.8
50-74%	30.1	17.6	14.6	6.0	8.3	23.4
Highest Quartile	51.9	11.9	10.6	4.3	4.8	16.6
TEST QUARTILE						
Lowest Quartile	12.6	23.5	12.8	4.9	11.9	34.2
25-49%	19.8	22.2	15.0	5.8	10.0	27.2
50-74%	31.0	16.9	15.1	6.3	7.2	25.6
Highest Quartile	52.4	9.6	13.4	4.9	3.6	16.1
SELF CONCEPT QUARTILE						
Lowest Quartile	19.9	18.4	15.0	5.7	9.3	31.8
25-49%	26.0	17.3	15.6	5.7	7.5	27.9
50-74%	29.1	18.5	14.8	5.3	7.7	24.5
Highest Quartile	38.6	18.0	11.9	5.1	8.0	18.3

SOURCE: U.S. Department of Education, National Center for Education Statistics, "National Education Longitudinal Study of 1988: Base Year Student Survey".

Table 4.5.--Percentage of eighth graders who never discussed various high school programs with various adults, by expected high school program

Expected High School Program	Never Discussed with			
	Mother	Father	Teacher	Counselor
TOTAL	11.0	26.0	53.5	64.1
College Preparatory	4.9	16.3	40.9	54.9
Vocational, Technical Business Career	9.3	24.5	54.4	63.8
General High School	11.6	26.9	56.5	63.0
Specialized Programs	9.1	27.4	51.0	63.0
Other	11.8	27.8	54.7	68.1
Don't Know	19.2	37.3	66.4	75.0

SOURCE: U.S. Department of Education, National Center for Education Statistics, "National Education Longitudinal Study of 1988: Base Year Student Survey".

Table 4.6.--Percentage of eighth graders aspiring to various occupations by selected student characteristics.

Student Characteristics	Occupations													
	Craftsperson or Operator	Farm or Farm Manager	Housewife Homemaker	Laborer or Farm Worker	Military, Police or Security	Professional Business, or Managerial	Owner of a Business	Technical	Salesperson Clerical or Office work	Science or Engineer	Service Worker	Other	Won't Be Working	Don't Know
TOTAL	4.2	1.0	2.3	0.6	9.6	28.7	6.2	6.2	2.8	5.9	4.9	17.0	0.2	10.5
SEX:														
Male	7.6	1.7	0.2	1.0	14.9	19.6	6.8	8.3	1.2	8.5	2.1	17.6	0.3	10.4
Female	.9	0.3	4.4	0.1	4.3	37.6	5.6	4.2	4.5	3.3	7.7	16.5	0.1	10.6
RACE/ETHNICITY														
Asian and Pacific Islander	3.6	0.6	1.1	0.7	7.0	34.9	6.4	7.6	2.3	9.7	2.3	13.4	0.0	10.5
Hispanic	5.3	0.6	2.9	0.8	11.0	26.0	5.7	7.3	3.8	4.8	3.9	15.1	0.3	12.5
Black	3.2	0.1	0.9	0.6	11.5	29.4	5.8	8.0	2.9	4.2	6.4	16.3	0.4	10.4
White	4.3	1.2	2.5	0.5	9.0	28.7	6.3	5.7	2.7	6.1	4.9	17.7	0.2	10.2
American Indian and Native Alaskan	6.6	0.3	3.1	0.2	17.0	23.0	5.7	6.5	2.3	6.4	3.4	11.9	0.1	13.5
PARENT EDUCATION:														
Did Not Finish High School	7.2	1.0	3.8	1.0	11.5	19.8	5.4	6.8	4.7	2.4	7.3	13.7	0.5	15.1
High School Graduate	6.3	1.3	2.6	1.0	11.4	22.1	5.8	6.0	3.4	3.6	6.6	17.3	0.2	12.5
Some College	4.3	1.1	2.0	0.5	10.3	27.7	6.1	6.8	2.9	5.4	4.9	17.8	0.1	10.1
College Graduate	1.9	0.8	1.7	0.2	6.6	35.2	7.4	6.0	1.9	9.2	2.8	17.1	0.2	8.9
Higher Level After College	0.8	0.5	2.2	0.3	5.9	43.0	6.0	4.4	1.5	10.2	2.6	16.5	0.2	6.0
HIGH SCHOOL PROGRAM PLANS:														
College Preparatory, Academic	1.5	0.6	1.2	0.3	8.1	41.7	5.3	6.6	1.9	12.0	2.5	13.6	0.1	4.7
Vocational, Technical, Business Career	7.5	1.4	1.5	0.7	9.9	29.3	8.9	10.6	5.3	3.2	5.5	10.3	0.2	5.8
General High School Program	4.8	1.0	4.4	0.9	10.1	26.1	6.7	4.4	3.1	3.4	5.9	17.4	0.4	11.4
Specialized High	3.1	0.4	2.6	0.5	8.6	17.9	7.9	5.1	1.1	2.6	5.6	39.0	0.3	5.3
Other	5.5	1.2	2.5	0.5	14.1	19.4	3.9	5.4	1.3	3.6	6.9	30.2	0.2	5.4
Don't Know	4.5	1.3	2.9	0.6	9.6	20.0	5.3	4.2	3.0	3.3	5.9	16.2	0.3	23.0

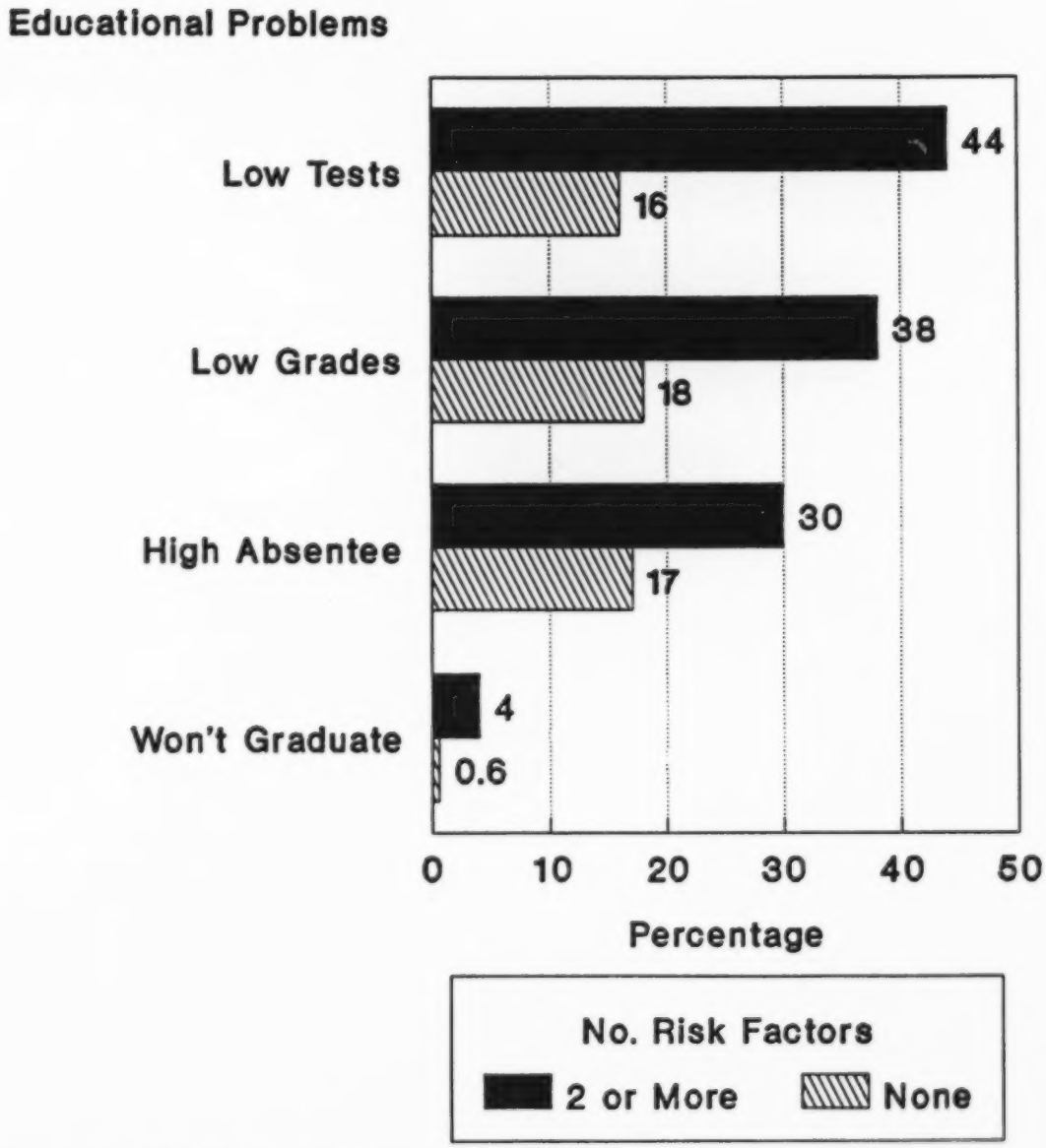
SOURCE: U.S. Department of Education, National Center for Education Statistics, "National Education Longitudinal Study of 1988: Base Year Student Survey".

Table 4.7.--Percentage of eighth graders aspiring to various education levels by selected student characteristics

Student Characteristics	Education Levels					
	Won't Finish High School	Will Finish High School	Vocational, Trade, Business After	Will Attend College	Will Finish College	Will Attend Graduate School
TOTAL	1.5	10.5	9.4	13.1	42.8	22.7
SEX						
Male	1.8	12.1	10.1	13.3	42.5	20.2
Female	1.1	9.0	8.7	13.0	43.1	25.2
RACE/ETHNICITY						
Asian and Pacific Islander	1.5	5.8	4.9	12.1	37.4	38.2
Hispanic	2.6	14.8	10.7	17.1	33.2	21.5
Black	1.4	8.2	10.2	16.3	39.4	24.5
White	1.3	10.4	9.2	11.9	45.2	21.9
American Indian and Native Alaskan	3.2	16.0	13.8	16.5	33.9	16.7
SES QUARTILE						
Lowest Quartile	3.5	21.8	14.7	17.0	30.5	12.5
25 - 49%	1.4	12.6	12.0	15.0	42.5	16.5
50 - 74%	0.7	6.2	8.0	14.5	48.1	22.6
Highest Quartile	0.4	1.7	3.0	6.1	50.0	38.9
GRADES						
Lowest Quartile	4.0	23.5	15.5	18.0	29.9	9.2
25 - 49%	1.0	11.3	11.5	17.2	43.2	15.7
50 - 74%	0.6	6.1	8.0	12.6	50.6	22.2
Highest Quartile	0.2	2.2	3.6	5.9	47.6	40.6
TEST QUARTILE						
Lowest Quartile	3.9	21.1	14.7	18.5	29.2	12.7
25 - 49%	1.2	13.1	11.8	16.5	43.1	14.3
50 - 74%	0.4	6.2	8.0	12.2	49.9	23.3
Highest Quartile	0.2	1.3	3.3	5.3	48.9	40.9
EXPECTED H.S. PROGRAM						
College Preparatory	0.4	1.8	2.4	8.0	46.4	41.0
Voc./Tech./Bus.	1.4	9.9	24.6	12.7	36.1	15.4
General	1.5	15.7	8.9	14.9	44.8	14.3
Specialized	0.8	9.0	7.3	13.7	49.0	20.3
Other	1.9	11.0	7.6	15.2	44.6	19.7
Don't Know	2.5	18.2	8.1	17.4	40.9	12.9

SOURCE: U.S. Department of Education, National Center for Education Statistics, "National Education Longitudinal Study of 1988: Base Year Student Survey".

Figure 4.3 Percentage of Eighth Graders with Various Educational Problems, by Number of Risk Factors



SOURCE: U.S. Dept. ED. NCES, NELS:88 BY

III. Postscript: The longitudinal dimension: issues for the next wave

The base year survey provides a rich cross-sectional database but it is of course only with the addition of data from the first follow-up (1990) wave of NELS:88 that longitudinal analyses can begin. At that time as well, cross-cohort comparisons can begin to be made to the High School and Beyond sophomores, while with the second follow-up in 1992, NELS:88 data can be used in trend analyses with the HS&B senior cohort and NLS-72.

The base year data, when conjoined with the data gathered in the first follow-up, can help to address a number of major educational policy issues. For example, researchers will be able to investigate the transition patterns from eighth grade to secondary school. Since most students will change school (moving from middle or junior high school to high school), and many will move across sectors (that is, between private and public schools), the effects of different transition patterns on the educational experience of tenth graders can be examined in detail.

Another major policy issue that can be addressed in later longitudinal analyses is the dynamics of ability grouping as it affects the educational experiences and achievements of students as they move from eighth grade to high school. By collecting data during the base year that 1) attempts to determine levels and types of ability grouping, and 2) documents the roles of students, teachers, administrators and parents in this process, researchers will be able to study the effects of earlier tracking decisions on the educational experiences of tenth graders.

NELS:88 data will help also to learn more about the determinants of persistence in and the completion of the eighth through tenth grades. High School and Beyond supplied excellent longitudinal data on later dropouts (those who drop out after grade ten). NELS:88, however, will provide data on both early and late dropouts, including those 1988 eighth graders who drop out before reaching grade ten.

School, teacher, student and dropout data is currently being collected for the NELS:88 first follow-up, and is expected to become available approximately one year from now.

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Appendices

APPENDIX 1: **SAMPLE FRESHENING:** GENERATING A NATIONALLY REPRESENTATIVE SAMPLE OF SPRING 1990 SOPHOMORES FROM THE NELS:88 EIGHTH GRADE COHORT 1988 SAMPLE.

APPENDIX 2: NELS:88 BASE YEAR KEY QUESTIONNAIRE ITEMS RELATED TO SELECTED-THEMES IN CURRENT EDUCATIONAL POLICY RESEARCH.

APPENDIX 1: SAMPLE FRESHENING: GENERATING A NATIONALLY REPRESENTATIVE SAMPLE OF SPRING 1990 SOPHOMORES FROM THE NELS:88 EIGHTH GRADE COHORT 1988 SAMPLE.

The following four-step freshening procedure was developed by NORC's Martin R. Frankel to ensure that a valid probability sample of all students enrolled in the tenth grade in 1990 (and a valid probability sample of all students enrolled in the twelfth grade in 1992) can be achieved. The procedure may be summarized step-by-step as follows:

1. For each school that contained at least one base year tenth grade student selected for interview in 1990, a complete alphabetical roster of all tenth grade students will be obtained.

2. An examination is made of the student immediately following (alphabetically) the selected base year student. If the base year student is the last on the roster, the examination is undertaken for the first student on the roster (that is, the roster is circularized).

3. If the student designated for examination was enrolled in the eighth grade in the United States in 1988, then the process terminates. If the student designated for examination was not enrolled in eighth grade in the United States in 1988, then the student is selected as part of the freshened sample.

4. If a student was added to the freshened sample in step 3, the next student listed on the roster is selected for examination and step 3 is repeated. The step 3 and 4 sequence is repeated (students are added to the sample) until a student who was in the eighth grade in the United States in 1988 is reached on the roster.

Given that each student who is in the tenth grade should appear on a tenth grade roster, this method will generate a probability sample of students who are currently enrolled in the tenth grade but who were not enrolled in the eighth grade in the United States in 1988. Assuming an alphabetical tenth grade roster, with explicit circularization at its endpoints, the procedure explicitly links each tenth grade student not in the eighth grade in 1988 with the first earlier (reverse alphabetical order) student who was in the eighth grade in 1988. Since each tenth grade student who was not in the eighth grade in 1988 is automatically selected if we selected the linked tenth grade student who was in the eighth grade in 1988, then each student in this (former) population has a known, non-zero probability of selection. Thus we have a probability sample of the elements (students) of this population and have obtained a "freshening" sample to add to the NELS:88 eight grade cohort sample members who have been followed in 1990.

A similar freshening procedure will be used in the NELS:88 second follow-up (1992), when most sample members are seniors and a representative national sample of high school seniors is to be realized.

APPENDIX 2

NELS:88 base year key questionnaire items related to current educational policy in school research

I. Social capital/Parent involvement/ Community involvement

ISSUES

Active parental involvement, school policies and environment related to parental involvement, parental choice in school, parental networks and interactions.

STUDENT

S	34	Education level of parents
S	37	Parent participation at school

SCHOOL

SCH 37	Student test results provided to families
SCH 46	Available extracurricular activities
SCH 47	School climate/school policy enforcement

II. Equity/Access/Choice

ISSUES

Academic programs/school climate/admissions practices/PSE access/SES and ethnicity/junior high access/equal teaching quality and practices/A.P. and honors courses/remedial classes/student choices

STUDENT

S	20	Language use
S	31	A-D Race, ethnicity
S	57-59	School climate
S	66	Advanced courses
S	68	Gifted/talented programs

SCHOOL

SCH 4	Type
SCH 5	Major program orientation
SCH 13	Ethnicity
SCH 14	Percentage of students in single-parent homes
SCH 15	Percentage of students LEP (Limited English Proficiency)
SCH 16	Remedial and special programs
SCH 24	Assignment of students to the school
SCH 25-28	Admission procedures
SCH 33	Percentage of students with financial aid
SCH 34	Family ability to pay for tuition
SCH 35	Eighth grade scores used for high school admission
SCH 39	Minimum academic instruction required
SCH 40	Gifted/talented program

III. School effectiveness

ISSUES

Influence of size and school on outcomes, student body ethnicity and SES level effect on outcomes, effect of school type and affiliation on outcomes, school climate effect on outcomes, staff and curriculum effect on outcomes

STUDENT

Cognitive test scores

S	81	Self-reported grades

SCHOOL

SCH 2	School enrollment
SCH 6	Length of school year
SCH 10	Nominated tenth grade
SCH 11	Average daily attendance
SCH 12	Dropout/migration rate
SCH 17	Number of full-time teachers
SCH 18	School structure for instruction
SCH 19	Teacher base salary
SCH 21	Teacher degree level
SCH 38	Retention reasons
SCH 45	Bilingual classes
SCH 47	School climate
SCH 48	School policies
SCH 49	Discipline and other problems

APPENDIX 2

NELS:88 base year key questionnaire items related to current educational policy in school research--Continued

I. Social capital/Parent involvement/ Community involvement

PARENT

P	30	Parent education level
P	45	Parent request to retain child in school
P	54, 56	Parent involvement in course selections
P	57	School contact with parent about child
P	58	Parent contact with school about child's performance
P	59	Parent participation in school organizations
P	61	Outside community activities with child
P	62	Parent knowledge of child's friends and their parents
P	63	Nonschool activities of child
P	66	Parent time talking with child about school
P	67	Talk with child about high school plans
P	68	Talk with child about postsecondary plans
P	69	Parent time helping child with homework
P	85	Parent involvement with financial aid and scholarships

II. Equity/Access/Choice

PARENT

P	10	Race, ethnicity
P	34, 80	SES level
P	38	Child's attendance at preschool
P	48	Child's participation in special programs
P	52	Child in gifted/talented program
P	70	Computer in home that child uses
P	82	Money available for educational expenses
P	84	How much money earmarked for student's postsecondary education
P	22	Language spoken in the home

III. School effectiveness

PARENT

P	34, 80	SES level
P	57	School contact with parent
P	74	Parent opinion of school's effectiveness
P	75	Parent satisfaction with school curriculum
P	76	Parent opinion of child's schooling future

APPENDIX 2

NELS:88 base year key questionnaire items related to current educational policy in school research--Continued

I. Social capital/Parent involvement/ Community involvement

TEACHER

T.	III-26	Problems with school policies as related to student, community, and parent: illegal drugs, weapons, assault, robbery, vandalism, etc.
T.	III-30	Teacher time spent communicating with parents
T.	III-31	How many students' parents does teacher talk to

II. Equity/Access/Choice

TEACHER

T.	I-11	Teacher perception of student as a language minority student
T.	I-12	Teacher perception of student as Limited English Proficiency student
T.	II-16	Teaching practices in the classroom
T.	II-17, 29	Teaching methods for specific subjects used in the classroom
T.	III- 4	Years of teaching experience
T.	III- 6	Type of teaching certificate
T.	III-19	Amount of in service education in past year
T.	III-21	Instruct in gifted/talented program
T.	III-27	Holding a second job
T.	III-30	Time spent outside school hours on teacher activities such as planning classes, correcting papers, coordinating curriculum, etc.
T.	III-32	Percentage of students using microcomputer for instructional material

III. School effectiveness

TEACHER

T.	I-(2-9)	Teacher rating of student's academic performance and participation in class
T.	II- 3	Class size
T.	II-14	Teacher adequacy
T.	III-8	Highest academic degree held
T.	III-10	Major and minor fields of highest grade degree
T.	III-18	Employment status in the school system
T.	III-28	Number of days absent from teaching
T.	III-29	Number of supervisory visitations
T.	III-33	How does teacher make use of microcomputer for student instruction